Environmental Management Performance Report

November 2001

Air Rotary Rig at 241-U Tank Farm

Scaffold Erection at 233-S

Demolished 54-inch RCP from Lewis Canal (116-F-1)

Focused on Progress...
Focused on Outcomes!

Data as of month-end September (unless otherwise noted).
Key data as of October 25.

Department of Energy
Richland Operations Office

Bechtel Hanford, Inc.
Environmental Restoration Contractor

E0111012.3

ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT
ENVIRONMENTAL RESTORATION
NOVEMBER 2001

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ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT
ENVIRONMENTAL RESTORATION
NOVEMBER 2001

INTRODUCTION

The monthly Environmental Restoration (ER) Environmental Management Performance Report consists of three sections: Section A - Executive Summary, Section B - Restoring the River Corridor Project Summaries, and Section C - Transitioning the Central Plateau Project Summaries. All data is current as of September 30, unless otherwise noted. For this month's report, emphasis is focused on providing a fiscal year 2001 (FY01) summary overview of accomplishments, cost/schedule performance, and key integration activities.

Section A – Executive Summary. This section provides an executive level summary of Bechtel Hanford, Inc.'s (BHI) performance information from a FY01 perspective and is intended to bring to management's attention that information considered to be most noteworthy. The Executive Summary begins with a description of notable accomplishments that are considered to have made the greatest contribution toward safe, timely, and cost-effective cleanup during FY01. Major commitments are summarized that encompass *Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement)* milestones, and FY01 Environmental Management (EM) corporate performance measures. Safety statistics are also included. Issues that require management and/or regulator attention and resolution status are addressed. Fiscal year-end Environmental Restoration Contractor (ERC) Project cost and schedule variance analysis is summarized. The Key Integration Activities section highlights site activities that cross contractor boundaries and demonstrates the shared value of working as a team to accomplish the work. The Executive Summary ends with a listing of major upcoming planned key events within a 90-day period.

Section B – Restoring the River Corridor. This section contains more detailed FY01 activity information and performance status for the three projects within the 'Restoring the River Corridor' outcome. These three projects consist of the Remedial Action and Waste Disposal (RAWD) Project, Decommissioning Projects, and the Program Management and Support (PM&S) Project.

Section C – Transitioning the Central Plateau. This section contains more detailed FY01 activity information and performance status for the two projects within the 'Transitioning the Central Plateau' outcome. These two projects consist of the Groundwater/Vadose Zone (GW/VZ) Integration Project and the Surveillance/Maintenance and Transition (SM&T) Projects.

Information in this report is identified with a green, yellow, or red text box used as an indicator of the overall status. Green indicates work or issue resolution is satisfactory and generally meets or exceeds requirements; yellow indicates that significant improvement is required; and red indicates unsatisfactory conditions requiring immediate corrective actions.

Section A: Executive Summary

SECTION A – EXECUTIVE SUMMARY

**Data as of month-end September (unless otherwise noted).
Key data as of October 25, 2001.**

NOTABLE ACCOMPLISHMENTS:

Fiscal year 2001 (FY01) was another year of substantial progress in Hanford Site environmental restoration activities. Cleanup activities involved remedial action and waste disposal, groundwater management and groundwater/vadose zone (GW/VZ) integration, 233-S facility decommissioning, reactor interim safe storage (ISS), surveillance and maintenance of deactivated facilities, and project support. The primary focus of this progress report is to identify the significant accomplishments that were achieved in all areas of the Hanford Site Environmental Restoration (ER) Project throughout FY01.

RIVER CORRIDOR:

Remedial Action and Waste Disposal Project

Soil and pipeline remediation efforts witnessed substantial progress in the 100 B/C, D, F, H, and N Areas during FY01. Backfill operations were completed for the liquid waste sites and pipelines in the 100 D (five months ahead of schedule) and 100 H Areas (two months ahead of schedule). Pipeline remediation was initiated in the 100 B/C Area on February 26, where excavation of three concrete pipelines and three river outfall structures was completed.

In the 100 F Area, over 335,000 metric tons (370,000 tons) of contaminated waste were removed and disposed in the Environmental Restoration Disposal Facility (ERDF). This accounted for 61% of the total waste disposed in ERDF during FY01. In the 100 N Area, excavation of the 116-N-3 Crib and associated structures was completed, and characterization activities were initiated in preparation for planned FY02 116-N-1 Crib remediation. As low as reasonably achievable (ALARA) radiological protection efforts were effective during 100 N Area remediation activities, developing processes and techniques to protect equipment and workers from one of the highest radiation environments currently undergoing remediation.

In addition to 100 Area remediation activities, notable remediation progress was also made in the 300 Area. The 300-FF-2 Operable Unit Record of Decision (ROD) was approved by the regulators on April 5, allowing cleanup of the remaining contaminated sites in the 300 Area to proceed. Remediation was also accelerated for the 618-4 Burial Ground drummed waste containers. A contract award is planned for early FY02 that will address interim waste staging of the drummed waste at ERDF. Additionally, excavation activities were completed at the J.A. Jones and 600-23 waste sites during FY01, supporting soil remediation activities in the Phase I river corridor area.

On July 2, the five-year anniversary of ERDF disposal operations was observed, which also marked the achievement of no lost-time accidents by the ERDF team during this period. In addition, over 8.7 million kilometers (5.5 million miles) have been logged transporting contaminated waste to ERDF without an at-fault accident since ERDF began operations in July 1996. Over 2.8 million metric tons (3.2 million tons) of contaminated waste have been removed and disposed in ERDF since project inception.

Decommissioning Projects

Good progress continued on reactor ISS activities at the F, D, DR, and H Reactors (in the 100 Area), as planned, during FY01. The safe storage enclosure (SSE) contract was awarded for the F and DR Reactor roofs in May. To date, DR Reactor ISS is 90% complete. Completion of the SSE will complete the overall DR Reactor ISS, planned for September 2002. Excavation of the remaining one meter (three feet) of fill/sludge in the F Reactor Fuel Storage Basin (FSB) continued. FSB cleanout has slowed due to an increasing number of suspected fuel fragments being encountered during excavation. To date, F Reactor ISS is 77% complete, and is planned for completion by September 2003.

NOTABLE ACCOMPLISHMENTS continued:

All planned FY01 ISS activities were completed for D and H Reactors including hazardous material removal, asbestos abatement, liquid pipe checks, and pipe/equipment removal. D Reactor demolition operations started in February. To date, D Reactor ISS is 47% complete, and is planned for completion by September 2003. H Reactor ISS is 19% completed, and is planned for completion by September 2004.

Significant progress was made in decommissioning of the 233-S Plutonium Concentration Facility located in the 200 Area. Acceleration efforts were successful, and a total of nine process hood vessels were removed throughout FY01. Only three vessels had originally been planned for removal. In the past four years (since project inception), over 10,000 entries have been made into the highly contaminated 233-S facility without any significant radiological occurrences. Confined workspace environments and contamination hazards are encountered during each entry where decommissioning operations are being performed.

Program Management and Support

During FY01, the Program Management and Support (PM&S) group achieved several noteworthy accomplishments. A national pollution prevention award was received for implementation of the Small Diameter Geophysical Logging System. Bechtel Hanford, Inc. (BHI) also received a runner-up award for using value methodology in assessing waste minimization opportunities. All FY01 small business socioeconomic contractual goals were exceeded. Small, small-disadvantaged, and women-owned small business prime contract goals have been met or exceeded for the entire seven years of BHI's prime contract.

Several planning documents were submitted as required by the U.S. Department of Energy (DOE) Richland Operations Office (RL) and DOE Headquarters (HQ). The ER Project Baseline Update and FY02 Project Baseline Summary/Work Breakdown Structure (PBS/WBS) summary documentation were submitted in January, as planned. FY02 Detailed Work Plan (DWP) management review meetings were conducted with the Environmental Restoration Contractor (ERC), RL, HQ, regulators, and stakeholders. The FY02 DWP was completed on September 25, as planned. The FY03 budget development effort was supported as well. Support was also provided for various FY02 funding exercises as requested by RL and HQ.

CENTRAL PLATEAU:

Groundwater/Vadose Zone Integration Project

During FY01, the GW/VZ Integration Project (Integration Project) noted numerous achievements and milestones. The Science and Technology (S&T) program received very positive marks from the 18-month review conducted by the National Research Council (part of the National Academy of Sciences). Three meetings were held during FY01 with the Integration Project Expert Panel where topics focused on the Columbia River issues, Integration Project transition strategies, and the System Assessment Capability (SAC) initial assessment rollout. History-matching activities were completed for several technical elements in preparation for running the SAC model, from periods 1944 to 2000, to test integrated performance. The SAC is being designed to provide a cumulative assessment of the impacts and risks associated with Hanford Site contaminants. The Integration Project's first module of the virtual library was also deployed in August. The virtual library is a Web-based application that provides data important for Hanford Site characterization and contaminant transport modeling.

Phase I of the In Situ Redox Manipulation (ISRM) Project was completed two months ahead of schedule, and Phase II is nearing completion. All 32 wells were installed and 28 wells were chemically injected, as planned. The ISRM technology involves injecting a chemical (sodium dithionite) into an aquifer to create a chemically-altered treatment zone. Studies completed to date indicate that when contaminated groundwater passes through the permeable chemical zone (barrier) hexavalent chromium is converted to trivalent chromium, a significantly less toxic and less mobile form of chromium. The last phase (Phase III) of the ISRM Project will conclude in FY02 where the barrier will extend to approximately 702 meters (2,300 feet) parallel to the Columbia River.

NOTABLE ACCOMPLISHMENTS continued:

During FY01, a total of 21 Resource Conservation and Recovery Act (RCRA) groundwater monitoring wells were installed. Installation of these wells supported two major Hanford Federal Facility Agreement and Consent Order (*Tri-Party Agreement*) milestones, M-24-00L and M-24-00M.

Decommissioning of all 90 wells was completed as planned for FY01. Completion of some of these wells also marked completion of groundwater cleanup activities for the first section of the Columbia River corridor, which consists of a 36-square-kilometer (14-square-mile) section known as Phase 1A.

All five groundwater pump and treat systems operated above the planned 90% availability during FY01 (98% actual; 90% planned). The pump and treat systems remove contaminants (carbon tetrachloride, strontium, and chromium) from the groundwater and mitigate migration to the Columbia River. Approximately 1.1 billion liters of groundwater were processed during FY01; over 5.4 billion liters of groundwater have been processed to date.

The 200-ZP-2 vapor extraction system was restarted in April as planned. Approximately 2.5 billion liters of vapor were processed through the 200-ZP-2 soil vapor extraction system during FY 01, removing 709 kilograms of carbon tetrachloride.

Substantial progress was made in the 200 Area assessment/characterization efforts during FY01. Three 200 Area operable unit work plans were approved by the regulators (200-CS-1, 200-CW-5, 200-CW-1). The 200-PW-2 Operable Unit Rev. 0 work plan was also completed and is awaiting final approval. Well drilling and sampling field work was completed early for the 200-TW-1 and 200-TW-2 Operable Units, satisfying FY02 planned *Tri-Party Agreement* Milestones M-15-41A (more than three months ahead of schedule) and M-15-42A (one month ahead of schedule).

Surveillance/Maintenance and Transition Projects

All planned surveillance and maintenance (S&M) activities were completed during FY01 to ensure inactive facility integrity and safety. Activities completed included roof repairs/maintenance for five facilities, 100 and 200 Area asbestos abatement, and passive vent closures. In-tank characterization, sampling and analysis, and visual examination were completed for the two hexone tanks in the 200 Area. An evaluation of alternatives for interim stabilization of the hexone tanks was submitted to RL in July. In addition, a public comment/review period was completed in July for the B Reactor Engineering Evaluation/Cost Analysis (EE/CA). The EE/CA was submitted to the regulators for review and approval in September. The Canyon Disposition Initiative (CDI) Feasibility Study Rev. 0 and data summary report were completed in September. This study provides a detailed analysis of several alternatives to be considered for final disposition of the deactivated 221-U (U Plant) chemical processing canyon facility. The study is also expected to influence a final disposition determination for the four other canyon facilities on the Hanford Site.

MAJOR COMMITMENTS:

Tri-Party Agreement Milestones:

Green

A total of 18 *Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement)* milestones were achieved in FY01. All 14 planned FY01 *Tri-Party Agreement* milestones were completed ahead of schedule. In addition, four FY02 *Tri-Party Agreement* milestones were also completed during FY01. The four FY02 milestones completed early include the following:

- M-15-41A, "Complete 200-TW-1 Operable Unit Field Work Through Drilling and Sample Collection" (due October 31), was completed on July 20, more than three months ahead of schedule.
- M-15-42A, "Complete 200-TW-2 Operable Unit Field Work Through Drilling and Sample Collection" (due October 31), was completed on September 29, one month ahead of schedule.
- M-24-51, "Install Three Additional Wells at SST WMA B-BX-BY" (due December 31), was completed on September 5, four months ahead of schedule.
- M-24-52, "Install Three Additional Wells at SST WMA U" (due December 31), was completed on September 29, three months ahead of schedule.

Since July 1994 when the ER contract commenced, a total of 154 environmental restoration *Tri-Party Agreement* milestones have been achieved; 130 were completed ahead of schedule (84%).

Total *Tri-Party Agreement* Milestones Due in FY01	**14**
Total Planned Through September	14
Total Completed Through September (includes four completed FY02 milestones)	18

EM Corporate Performance Measures:

	DWP FY01	FY01 Mgmt Commitments	Current Baseline	Completed YTD
Waste Site Excavations	12	12	18	16
Technology Deployments*	0	5	22	22

Green

FY01 technology deployment performance measures identified deployment of five technologies. A total of 22 technology deployments were completed. Of the 22 deployments, 17 were first-time (new PBS) technology deployments. These deployments were instrumental in providing efficiencies in the efforts of waste site characterization and remediation, groundwater monitoring and sampling, and reactor ISS activities. (Refer to Section B, Program Management and Support, Performance Measures/Metrics for a detailed list of FY01 technology deployments.)

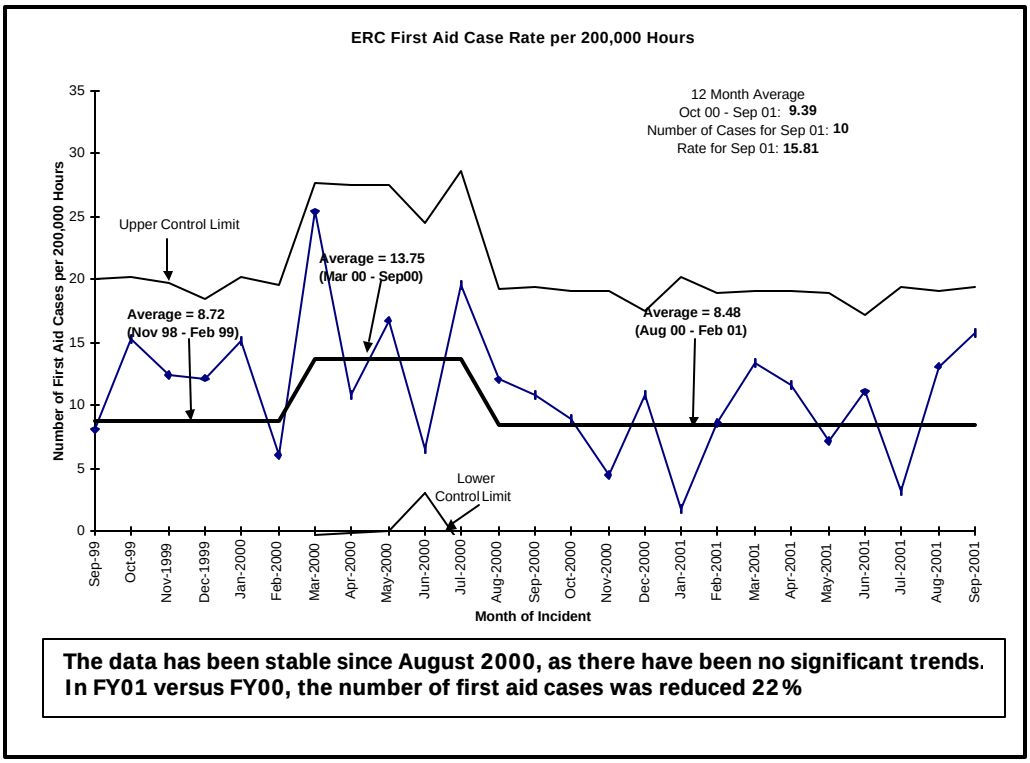
MAJOR COMMITMENTS continued:

EM Management Commitment:

Green

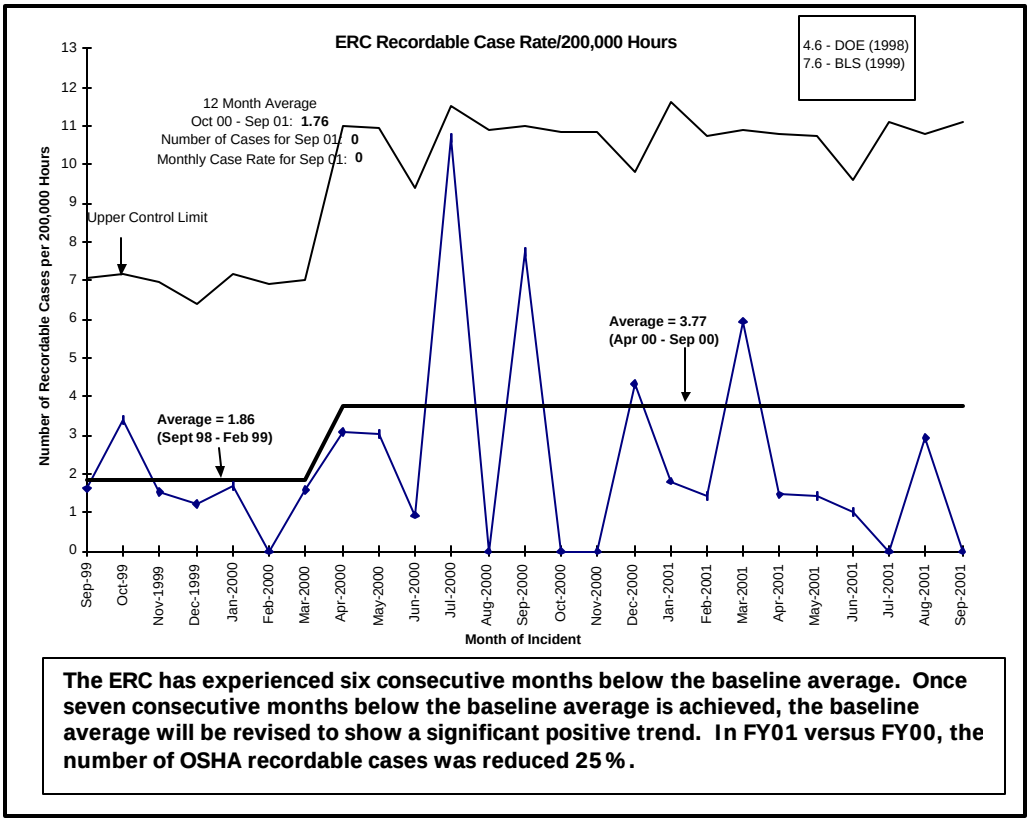
The Environmental Restoration (ER) Project had one FY01 management commitment milestone. The management commitment, "Install Four Additional Wells at SST WMA" due September 30, was met on April 2, when installation of five wells was completed.

SAFETY/ISMS/CONDUCT OF OPERATIONS (Total ER Contract only):



Green

The data has been stable since August 2000, as there have been no significant trends. In FY01 versus FY00, the number of first aid cases was reduced 22%

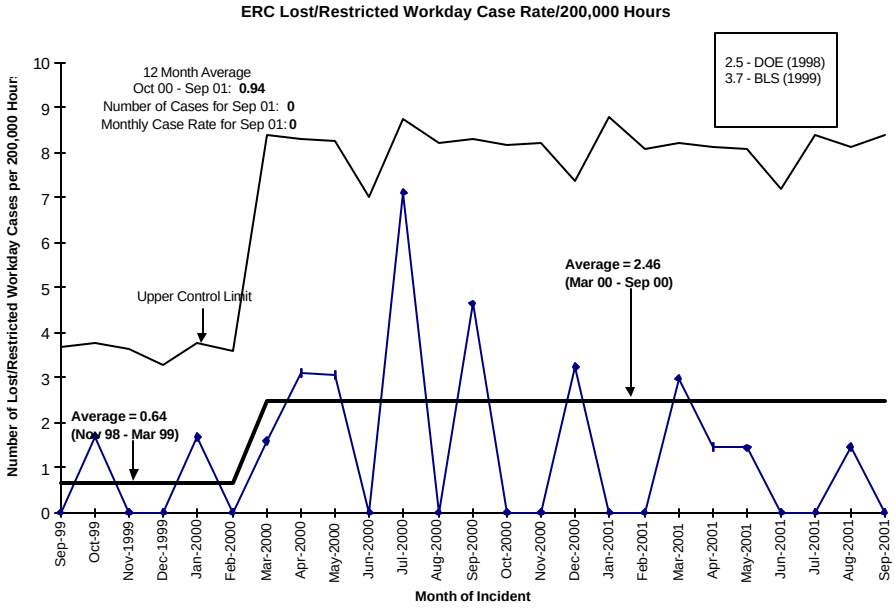


Green

The ERC has experienced six consecutive months below the baseline average. Once seven consecutive months below the baseline average is achieved, the baseline average will be revised to show a significant positive trend. In FY01 versus FY00, the number of OSHA recordable cases was reduced 25%.

SAFETY/ISMS/CONDUCT OF OPERATIONS (Total ER Contract only) continued:

Green



The ERC has experienced six consecutive months below the baseline average. Once seven consecutive months below the baseline average is achieved, the baseline average will be revised to show a significant positive trend.

SAFETY/ISMS/CONDUCT OF OPERATIONS (Total ER Contract only) continued:

Green

The following actions have or are being taken by the ERC to focus on safety improvement:

- BHI has developed a Medical Case Management desktop instruction for ERC managers, supervisors, and safety representatives. The purpose is to provide consistent management of occupational and non-occupational injuries and illnesses. Medical Case Management desktop instruction continues for ERC managers and supervisors. BHI Safety personnel visit the projects and provide the training to ERC managers and supervisors.
- The ERC has worked approximately 665,000 hours without a lost workday case. Continuous employee involvement is being fostered by the Integrated Safety Management System (ISMS), Voluntary Protection Program (VPP), and labor alliance programs, plus e-mail and one-on-one meetings with employees. The ERC experienced a significant reduction in first aid cases and Occupational Safety and Health Administration (OSHA) recordable cases in FY01 versus FY00; the number of first aid cases was reduced 22% and the number of OSHA recordable cases was reduced 25%.
- The third Incident Review Board meeting was held on September 8 and was well attended by workers, supervision, and senior management. Three topics were discussed. The first involved a case where a worker wearing the required Personal Protective Equipment (PPE), fell while carrying a welding machine down steps. The second involved symptoms several workers experienced following the aerial application of a herbicide. The third topic concerned the recent experience with slips and trips involving the radiological control technicians. The circumstances, causal factors, and corrective actions were discussed for each topic. These details along with lessons learned based on these incidents will be used to prevent future occurrences.
- All accidents are thoroughly investigated. Emphasis is placed on causes and corrective actions that can be implemented where applicable. Timely discussions are expected to take place in safety meetings and plan of the days (PODs). When investigations have been completed, the results of each investigation are sent to the Area Superintendents, Field Superintendents, and Supervisors to review at the PODs.
- Continue to look for trends and consult with corporate and other Bechtel National, Inc. (BNI) contacts for ways to enhance performance.
- BHI continues to work closely with the Hanford Atomic Metal Trades Council (HAMTC) Safety Representative to resolve safety issues as they arise.
- Senior management continues to meet with small groups of employees in the field to discuss safety and personal commitment.
- The Field Support General Superintendent and Project Safety Manager continue to visit different projects on a regular basis, meet with project team members, and conduct a safety walk around. Information from the walk around is shared with the team and other Field Support personnel. Safety conditions requiring corrective action are assigned to project personnel or support personnel for action and are tracked to closure. This activity is ongoing.

SAFETY/ISMS/CONDUCT OF OPERATIONS (Total ER Contract only) continued:

	FYTD	Current Period (8/20/01-9/16/01)	Current Period Comments
First Aid	84	10	(3) contusion, (1) puncture, (4) strain/pain, (1) foreign body to eye, (1) abrasion
OSHA Recordable	15*	0	N/A
Restricted Workday Case	3	0	N/A
Lost Workday Case	5	0	N/A

Green

*One incident was changed from recordable to non-work related.

The ERC, as of October 20, 2001, reports approximately 665,000 hours since the last lost workday incident. The last incident occurred on May 7, 2001 and became a lost time on May 31, 2001.

Green

SAFETY/ISMS/CONDUCT OF OPERATIONS (Total ER Contract only) continued:

ISMS:

Green

DOE EM Performance Agreement: Maintain and improve the approved Integrated Safety Management System (ISMS).

Status:

- BHI-01550, the Bechtel Hanford, Inc. Integrated ES&H Management System Performance Objectives, Measures and Indicators Process document was approved by RL on September 7, 2001 with four opportunities for improvement noted. A response (CCN 093623) addressing the four opportunities for improvement was sent to RL on October 15, 2001.
- Revision 3 of BHI-01199, Integrated Environment, Safety, and Health Management Description was submitted to RL for approval on October 1, 2001.
- Draft procedures for "Test Pit Excavation in Archaeological Areas" (BHI-EE-01-5.3) were written and distributed for internal review. These procedures establish methods for excavating test pits in archaeological areas that are compliant with both OSHA Standards and scientific best practices.

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SAFETY/ISMS/CONDUCT OF OPERATIONS (Total ER Contract only) continued:

Green

- Highest Score on National Safety Council Survey: The ERC scored the highest in all eight program categories, and highest overall, when compared to the other Hanford site entities, in an employee perception survey conducted by the National Safety Council (NSC) at the Hanford site in May of 2001. These results indicate a very healthy safety culture within ERC. This independent survey was commissioned by the U.S. Department of Energy (DOE) Environmental Management Branch (EM) to be administered at all of the EM funded DOE sites. Hanford scored a 94% when benchmarked against the NSC database. ERCs overall scores correspond to the 99th percentile when benchmarked against the NSC database.
- Following the development of a comprehensive waste management process flow based on feedback and input from nearly every waste management staff, major revisions to BHI-EE-10 were necessary to fill gaps in requirements or best management practices, clarify requirements, consolidate requirements and processes, and increase the productivity of implementing waste management requirements in the field.
- A mapping update for Waste Information Data System (WIDS) sites has been completed. Approximately 510 sites have been added to the maps. Additionally, some sites have been expanded to many more components, e.g., pipelines.

Noteable Project Safety highlights for FY01 are another indication of the ERCs implementation/status of ISMS:

- The ERC has worked approximately 665,000 hours without a lost workday incident. The last lost workday incident occurred on May 7, 2001 and became a lost time incident on May 31, 2001.
- Over 5,000,000 miles have been driven transporting 3,000,000 tons of waste from Remedial Action/Waste Disposal (RAWD) Project sites to the Environmental Restoration Disposal Facility (ERDF) without an at-fault motor vehicle accident.
- ERDF Operations has achieved over 1,932 days without a lost time incident. No lost time injury has occurred since the operations subcontract was initiated in July 1996.
- Since work began on the Reactor Interim Safe Storage (RISS) project, over 6.5 years ago, there has not been a single lost time injury. Work has been performed for more than 4.5 years without a contamination event.
- With respect to the 233-S Decommissioning Project, FY01 was completed while sustaining only six injuries. This is a 50% decrease over FY00 (12 injuries). There were no unplanned uptakes during 3,382 entries into alpha airborne/high contamination areas. Additionally, in four years of aggressive decommissioning activities at 233-S, over 10,000 entries have been made into significant alpha contamination areas with no unplanned uptakes and only five personnel contamination events.
- Eberline Services Hanford, Inc. (formally Thermo Hanford, Inc.) a BHI subcontractor, recently completed 3.5 years (from February 10, 1998, to August 10, 2001) without a lost time incident.
- CH2M Hill Hanford Group, Inc. (CHI), a BHI subcontractor, has no lost time accidents since the inception of the ERC contract (July 1994).
- The Surveillance, Maintenance, and Transition (SM&T) team has worked:
  - Approximately 5,000 person hours on the hexone tanks in an adverse environment without any contaminations, lost work days, or recordable events.
  - SM&T Radiation Area Remedial Action (RARA) group has worked 7.0 years (since ERC contract inception) with only one lost time incident which occurred in February 2001.

SAFETY/ISMS/CONDUCT OF OPERATIONS (Total ER Contract only) continued:

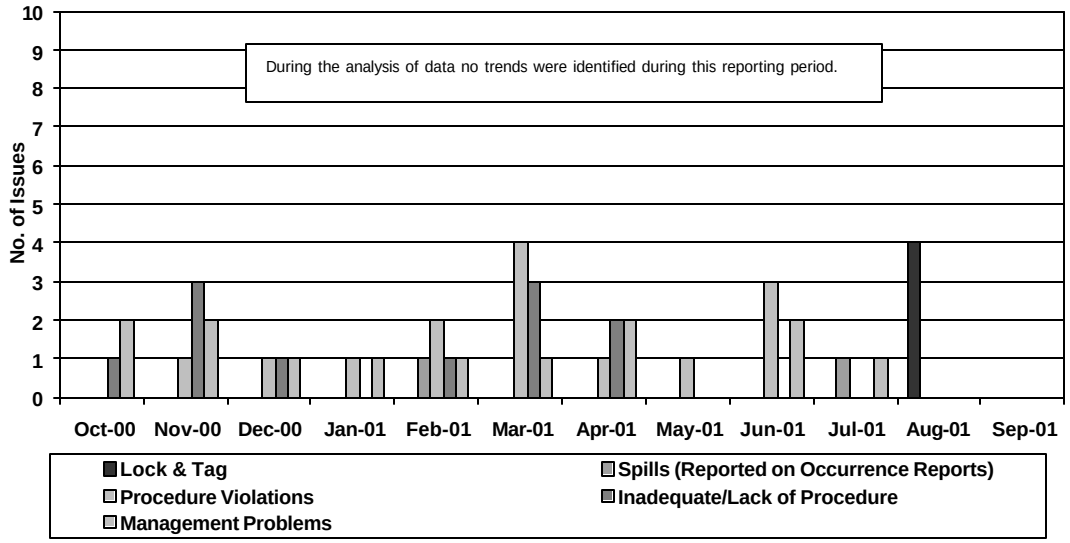
Conduct of Ops:

ERC-CATS (Corrective Action Tracking System) Trend Data 10/1/00 through 9/30/01

	Oct-00	Nov-00	Dec-00	Jan-01	Feb-01	Mar-01	Apr-01	May-01	Jun-01	Jul-01	Aug-01	Sep-01
Lock & Tag	0	0	0	0	0	0	0	0	0	0	4	0
Spills (Reported on Occurrence Reports)	0	0	0	0	1	0	0	0	0	1	0	0
Procedure Violations	0	1	1	1	2	4	1	1	**3	0	0	0
Inadequate/Lack of Procedure	1	3	1	0	1	3	*2	0	0	0	0	0
Management Problems	2	2	1	1	1	1	2	0	**2	1	0	0

* Trend data not received until September 2001.

** Trend data not received for one item until September 2001



Each potential trend is reviewed and evaluated for impact on the project, and then given the appropriate level of attention based on a graded approach.

September Conduct of Operations Issues:

None to report.

(Continued on next page)

SAFETY/ISMS/CONDUCT OF OPERATIONS (Total ER Contract only) continued:

Previous Conduct of Operations Issues Reported in September:

Procedure Problem:

Condition Description: An internal surveillance on lead air sample reporting was conducted with several deficiencies identified. Personal samples were evaluated for a surveillance. ESHI Industrial Hygiene transmitted to the project, interim laboratory results with attached ERU Industrial Hygiene Time-Weighted Average (TWA) Worksheet, to provide timely exposure assessments. The worksheets included the Permissable Exposure Level (PEL), action level, sample result, and 8-hour TWA. Of the 7 samples, 4 exceeded the PEL.

1) The project was maintaining the interim air sample results in a desk drawer. The sampled employees were not notified in writing of the results, which represent their exposure.
2) For exposures exceeding the PEL, the project was not including a written statement as to action taken or planned to reduce the exposure to below the level.
3) The email notifications from ESHI Industrial Hygiene do not include a statement that the employee's exposure was at or above the PEL.

Corrective Action Plan: A statement will be added to the Lead Removal Plan as to the action required when an employee has exposures at or above the PEL. The actions will include a plan to reduce lead air exposures and to notify the employee that they have met or exceeded the PEL. The employee will sign a document stating that they have been notified of the potential exposure above the PEL and corrective actions. Additional engineering controls that are added to the work package or the Lead Removal plan will be incorporated into a lessons learned for dissemination throughout the project and the company. ESHI developed a protocol for preliminary notification of employee lead exposure that includes the statement "at or above the PEL". The notification is due within five days of receipt of laboratory results. Interim guidance on regulatory-based notification was communicated to all Industrial Hygiene notification report writers. In an effort to prevent recurrence, Industrial Hygiene Management will review compliance with the guidance periodically.

Green

Condition Description: The Competent Person for Lead did not document the required frequent and regulator inspections of the job site, materials, and equipment.

Corrective Action Plan: The Project Safety Representative performed monitoring of worker and management compliance to the requirements of BHI-SH-02, Volume 3, Procedure 4.2.2, however, it was not documented. BHI-SH-02, Volume 3, Procedure 4.2.2, "Lead", does not specify any requirements for frequent and regular inspections even though the *Code of Federal Regulations* (CFR) requires this. Future lead activities will be monitored and documented as required. The craft supervisors will document the frequent and regular inspections in the projects daily logbooks. The Project Field Supervisors, Superintendent, and the Safety Officer will be counseled on the elements of the lead program as shown in BHI-SH-02, Volume 3. Persons performing monitoring of lead activities will document these activities in the project's daily logbooks, as defined in the revision to the Lead Compliance Plan for the reactors.

Green

SAFETY/ISMS/CONDUCT OF OPERATIONS (Total ER Contract only) continued:

Procedure Violation:

Condition Description: A procedure violation regarding respiratory equipment was identified.

1) Guidance for maintenance of the regulator was contained in OJT-13, but was not referenced in the BHI-SH-05 Manual.
2) The Industrial Hygiene technician who assembled the regulator most likely damaged the diaphragm lever that subsequently failed.
3) The inspection of the regulator by the Industrial Hygiene technician prior to assembly was not adequate to detect the damaged diaphragm.

Corrective Action Plan:

1) The procedure that controls maintenance on ERC respiratory equipment is BHI-SH-02, Vol. 3, 4.3.9. A Revision Order was issued to include directions in On-the-Job Training (OJT) as well as procedures for maintenance of equipment. Completion date was 8/8/01.
2) The inspection process was reviewed with all Industrial Hygiene technicians. An additional test was developed using calipers to further instruct Industrial Hygiene technicians in inspecting the spring lever. Completion date was 1/31/01.
3) Both the manufacturer and the National Institute of Safety and Health concluded from their investigations that there was no deficiency in the regulator inspection process, but that the failure occurred due to human error during the inspection. This deficiency was addressed in 2) above. No permanent change was made to the manufacturer's approved inspection process.
4) Industrial Hygiene technicians were briefed on the inspection process and shown the damaged lever as part of corrective action 2) above.
5) A Lessons Learned was sent out on this event on 1/31/01.

Green

Management Problem:

Condition Description: Fluor Hanford-Plutonium Finishing Plant (FH-PFP) Analytical Laboratory notified BHI of an error in their calculations which may effect the accuracy of fissile material inventory previously reported to BHI in FH-PFP nondestructive assay results.

Corrective Action Plan: BHI modified BHI-MA-02, Procedure 3.3, to allow independent oversight of services provided by other Hanford Site contractors. The notice of assessments will be included in future Work Orders (WOs) and Letters of Instruction (LOIs) when obtaining government supplied services from DOE contractors.

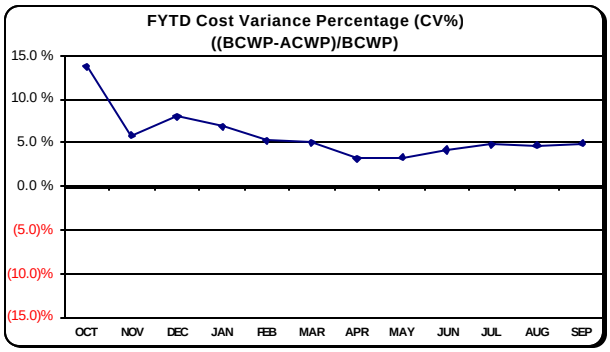
Green

REGULATORY/EXTERNAL/DOE-RL & HQ ISSUES AND REQUESTS:

Refer to individual Project issues in the following Section B and Section C.

TOTAL COST/SCHEDULE OVERVIEW (Total ER Contract incl. RL/PNNL):

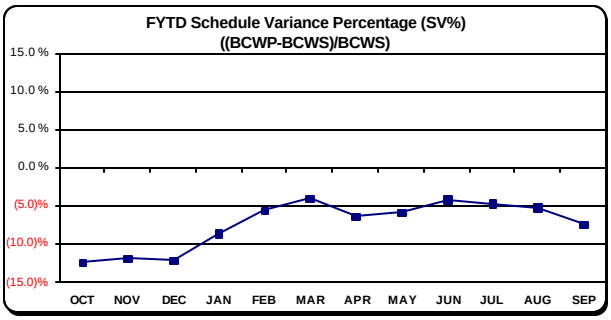
FY01 PERFORMANCE
FYTD SEPTEMBER 2001
($K)



Green

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	Out-Year FCST
CURRENT PERIOD													
ACWP	9,656	10,998	11,610	12,274	13,040	12,559	14,963	13,102	12,815	13,323	12,469	16,217	
BCWP	11,195	10,749	13,140	12,755	12,916	13,101	14,098	13,660	14,262	14,805	12,871	17,438	
FISCAL YEAR TO DATE													
ACWP	9,656	20,654	32,264	44,538	57,578	70,137	85,100	98,202	111,017	124,339	136,808	153,026	
BCWP	11,195	21,944	35,085	47,839	60,755	73,856	87,955	101,614	115,876	130,681	143,553	160,991	
CV	1,539	1,290	2,820	3,301	3,177	3,720	2,855	3,412	4,860	6,342	6,745	7,965	
CV %	13.7%	5.9%	8.0%	6.9%	5.2%	5.0%	3.2%	3.4%	4.2%	4.9%	4.7%	4.9%	
EAC (Cumulative)	9,656	20,654	32,264	44,538	57,578	70,137	85,100	98,202	111,017	124,339	136,808	153,026	166,129
Yr End Budget Variance	195	544	2,241	2,200	2,274	3,316	3,610	4,856	5,051	5,628	6,170	8,706	

For variance explanation by PBS, see Project Status Section of each project.



Green

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
DWP	11,110	10,286	12,233	10,282	10,058	11,813	14,703	11,619	11,559	13,381	11,497	13,404
DWP (Accum)	11,110	21,396	33,629	43,911	53,968	65,781	80,484	92,103	103,662	117,043	128,540	141,944
CURRENT PERIOD												
BCWS	12,782	12,103	15,015	12,418	12,003	12,656	16,859	13,957	13,038	16,158	14,253	22,626
BCWP	11,195	10,749	13,140	12,755	12,916	13,101	14,098	13,660	14,262	14,805	12,871	17,438
FISCAL YEAR TO DATE												
BCWS	12,782	24,885	39,900	52,318	64,322	76,977	93,836	107,793	120,831	136,989	151,241	173,867
BCWP	11,195	21,944	35,085	47,839	60,755	73,856	87,955	101,614	115,876	130,681	143,553	160,991
SV	(1,587)	(2,940)	(4,815)	(4,479)	(3,566)	(3,121)	(5,882)	(6,179)	(4,955)	(6,307)	(7,688)	(12,876)
SV %	-12.4%	-11.8%	-12.1%	-8.6%	-5.5%	-4.1%	-6.3%	-5.7%	-4.1%	-4.6%	-5.1%	-7.4%

The effective schedule variance at year-end after adjustment is $5.4M (3.2%). For variance explanation by PBS including effective adjustments, see Project Status Section of each project.

TOTAL COST/SCHEDULE OVERVIEW (Total ER Contract incl. RL/PNNL) continued:

FY01 PERFORMANCE
FYTD SEPTEMBER 2001
($K)

	FY01 DWP	CURRENT	FYTD			YTD SCHEDULE VARIANCE		YTD COST VARIANCE		
	BCWS	BCWS	BCWS	BCWP	ACWP	$	%	$	%	EAC
ER01 100 Area R/A	29617	30969	30969	29911	27504	-1058	-3.4%	2407	8.0%	28453
ER03 300 Area R/A	4127	2840	2840	2231	2008	-609	-21.4%	223	10.0%	2623
ER04 ER Waste	17420	19235	19235	18426	18261	-809	-4.2%	165	0.9%	19081
RA-Subtotal	**51164**	**53044**	**53044**	**50568**	**47773**	**-2476**	**-4.7%**	**2795**	**5.5%**	**50157**
ER02 200 Area R/A	443	3951	3951	3787	3317	-164	-4.2%	470	12.4%	3486
ER08 GW Management	24942	31184	31184	29141	27915	-2043	-6.6%	1226	4.2%	29998
VZ01 GW/VZ	10833	10986	10986	10465	10117	-521	-4.7%	348	3.3%	10636
GW/VZ-Subtotal	**36218**	**46121**	**46121**	**43393**	**41349**	**-2728**	**-5.9%**	**2044**	**4.7%**	**44120**
ER06 ISS	2065	16997	16997	12041	12151	-4956	-29.2%	-110	-0.9%	17194
ER06 233-S	5130	7096	7096	6651	6899	-445	-6.3%	-248	-3.7%	7357
DD-Subtotal	**7195**	**24093**	**24093**	**18692**	**19050**	**-5401**	**-22.4%**	**-358**	**-1.9%**	**24551**
ER05 S&M	13024	13737	13737	13675	12588	-62	-0.5%	1087	7.9%	12652
ER07 Long-Term S&M	59	59	59	59	31	0	0.0%	28	47.5%	31
SM-Subtotal	**13083**	**13796**	**13796**	**13734**	**12619**	**-62**	**-0.4%**	**1115**	**8.1%**	**12683**
ER10 ERC PM&S	28984	31249	31249	30009	27638	-1240	-4.0%	2371	7.9%	29056
ER10 RL PM&S	5300	5564	5564	4596	4596	-968	-17.4%	0	0.0%	5564
PM-Subtotal	**34284**	**36813**	**36813**	**34605**	**32234**	**-2208**	**-6.0%**	**2371**	**6.9%**	**34620**
GRAND TOTAL	**141944**	**173867**	**173867**	**160992**	**153025**	**-12875**	**-7.4%**	**7967**	**4.9%**	**166131**

Green

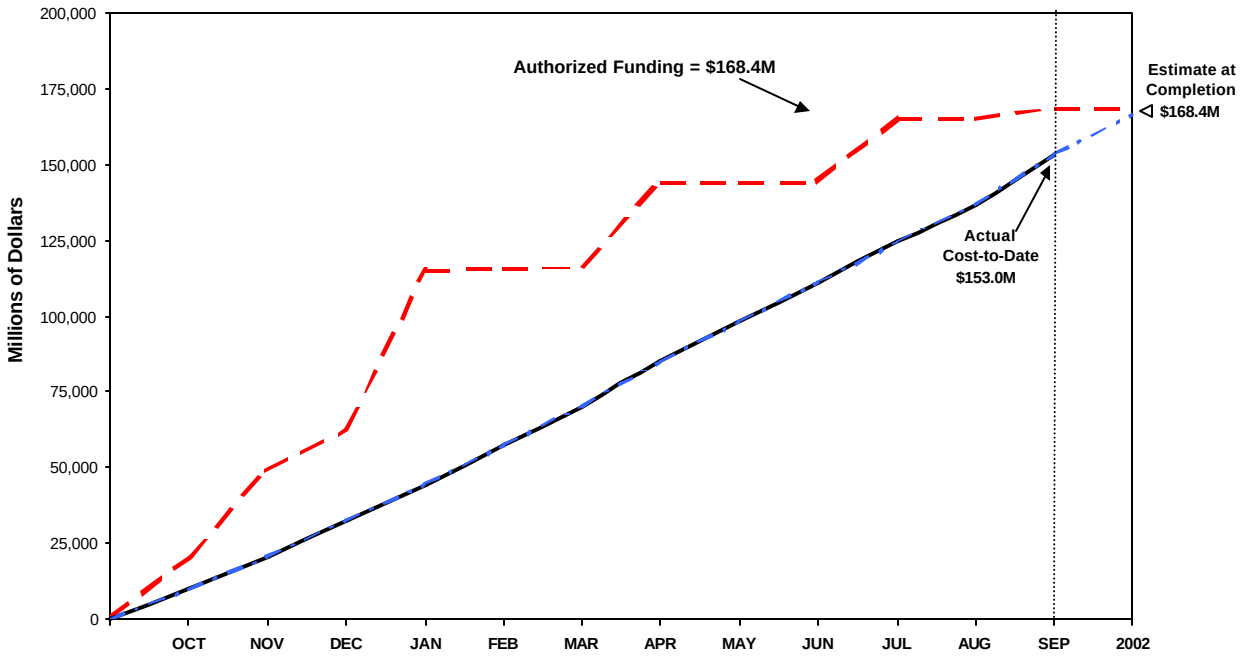
Cost Variance Summary

At the end of FY01, the ER Project had performed $161.0M worth of work, at a cost of $153.0M. This results in a favorable cost variance of $8.0M (+4.9%). The positive cost variance is attributed to less labor required due to sharing resources between 100 D and B/C Area remediation efforts, less labor required to complete remediation cleanup verification packages (CVPs) due to the use of a streamlined format and consolidation of waste sites, underruns in GW/VZ monitoring/sampling and In Situ Redox Manipulation (ISRM) subcontract/chemical costs, 200 Area general S&M tasks and herbicide application costs less than planned, and program management support level less than planned.

Schedule Variance Summary

The ER Project ended FY01 with a $12.9M (-7.4%) negative schedule variance. Approximately $7.5M of the variance (58%) relate to fiscal year-end carryover items that affect the variance but are not behind schedule. These include Interim Safe Storage (ISS) special funding/scope received in September, equipment purchase scheduled for delivery in early FY02, additional funding/scope in September to accelerate 300 Area remediation work, Grand Junction Borehole Logging, Hanford Site-wide assessments that will be invoiced in FY02, and accounting adjustments relative to performance fee payments. After adjustment of these items, the net year-end negative schedule variance is $5.4M (-3.2%). Behind-schedule work at fiscal year-end is attributed to delays in 100 F and N Areas excavation due to larger-than-anticipated contaminated soil plumes and subcontractor termination at 100 F, 200-ZP-1 Plutonium Finishing Plant (PFP) well drilling delayed due to higher drilling priorities, granular-activated carbon regeneration shipment delays, late start on vadose zone S&T items, and difficulties with 233-S process hood decommissioning.

TOTAL COST/SCHEDULE OVERVIEW (Total ER Contract) continued:



FY01 PBS	FY02 PBS	Authorized Funds	ACWP	Funding Carryover
ER01	RC01	$28,800,000	$27,504,003	$1,295,997
ER02	CP01	$3,700,000	$3,317,447	$382,553
ER03	RC02	$2,700,000	$2,007,865	$692,135
ER04	RC05	$18,800,000	$18,261,209	$538,791
ER05	VARIOUS	$13,100,000	$12,588,129	$511,871
ER06	RC01/CP01	$24,297,176	$19,046,984	$5,250,192
ER07	SC01	$44,976	$31,087	$13,889
ER08	VARIOUS	$19,234,509	$17,563,733	$1,670,776
ER08	CP01	$124,491	$78,756	$45,735
ER09	RC01	$2,824	$2,502	$322
ER10	VARIOUS	$30,430,000	$27,638,289	$2,791,711
VZ01	SS04	$5,647,780	$5,502,239	$145,541
BHI Total		**$146,881,756**	**$133,542,243**	**$13,339,513**
ER08	SS03	$10,068,900	$9,757,570	$311,330
VZ01	SS04	$4,818,000	$4,451,875	$366,125
PNNL Total		**$14,886,900**	**$14,209,445**	**$677,455**
ER08	RL	$800,000	$515,185	$284,815
ER10	RL	$5,563,662	$4,596,205	$967,457
VZ01	RL	$255,694	$162,340	$93,354
***RL Total**		**$6,619,356**	**$5,273,730**	**$1,345,626**
TOTAL ERC		**$168,388,012**	**$153,025,418**	**$15,362,594**

*RL carryover funding (uncosted) and associated scope will not be included in the ERC Baseline in FY02; these include ER08 – Borehole Logging, ER10 – RL Program Management & Support, and VZ01 – National Lab Support.

PERFORMANCE OBJECTIVES:

Refer to individual Project information in the following Section B and Section C.

KEY INTEGRATION ACTIVITIES:

Following is a summary of significant integration activities accomplished during FY01. Refer to individual Project key integration activities in the following Section B and Section C for additional integration items.

Green

River Corridor:

K Basin requirements were coordinated with Fluor Hanford (FH) in support of pending fuel element shipments from F and H Reactor FSB demolition.

Above-grade demolition of the 303-K building (FH building located in the 300 Area) was completed in September.

BHI Technology Applications personnel drafted the FY02 technology needs package. The package consisted of science needs statements, technology needs statements, and technology insertion points. A meeting was held with RL and other Hanford Site contractor representatives to plan a Technology Needs Workshop.

Central Plateau:

On July 11, drilling was initiated for the calendar year 2001 (CY01) RCRA well installations. Eleven wells are planned for installation by December 31, 2001. The first six wells were installed by September in support of the Office of River Protection (ORP).

ERC continues to work closely with the River Protection Project (RPP) and Pacific Northwest National Laboratory (PNNL) on vadose zone project plans and issues. RPP and PNNL project managers present related GW/VZ status to ERC management at monthly ERC project reviews.

UPCOMING PLANNED KEY EVENTS:

Green

RIVER CORRIDOR:

Tri-Party Agreement Milestone M-16-00F, Establish Date for Completion of All 100 Area Remedial Actions, due December 31.

CENTRAL PLATEAU:

Tri-Party Agreement Milestone M-13-26, Submit Plutonium/Organic-Rich Process Waste Group (200-PW-1) Work Plan, due December 31.

Tri-Party Agreement Milestone M-13-00L, Submit 3 200 NPL RI/FS (RFI/CMS) Work Plans, due December 31.

Tri-Party Agreement Milestone M-16-27B, Complete 100-HR-3 Phase II, ISRM Barrier Emplacement (Planning, Well Installation, and Barrier Emplacement), due December 31.

Tri-Party Agreement Milestone M-24-53, Install Two (2) Additional Wells at SST WMA TX-TY, due December 31.

Tri-Party Agreement Milestone M-24-54, Install One (1) Additional Well at SST WMA T, due December 31.

Tri-Party Agreement Milestone M-24-55, Install Two (2) Additional Wells at SST WMA S-SX, due December 31.

Tri-Party Agreement Milestone M-24-00M, Install RCRA Groundwater Monitoring Wells at Rate of Up to 50 in Calendar Year 2001 if Required, due December 31.

Environmental Management Performance Report

November 2001

Section B - River Corridor Information

- **Remedial Action and Waste Disposal Project**
- **Decommissioning Projects (Interim Safe Storage and 233-S)**
- **Program Management and Support**

F Reactor Fuel Storage Basin Cleanout

Front Loader Removing Overburden from Lewis Canal 54-inch RCP

Vessel L-3 Removal at 233-S

Focused on Progress...
Focused on Outcomes!

Data as of month-end September (unless otherwise noted).
Key data as of October 25.

Department of Energy
Richland Operations Office

Bechtel Hanford, Inc.
Environmental Restoration Contractor

E0111012.1

Remedial Action and Waste Disposal Project (RAWD)

SECTION B – RESTORING THE RIVER CORRIDOR

**Data as of month-end September (unless otherwise noted).
Key data as of October 25, 2001.**

Remedial Action & Waste Disposal Project (RAWD):

ACCOMPLISHMENTS: RAWD

A number of significant Remedial Action Waste Disposal (RAWD) Project accomplishments were achieved during FY01. These accomplishments are summarized below.

100/300 Area Remediation:

Excavation was completed for 16 contaminated waste sites (FY01 HQ performance measure identified 12 waste sites). To date, 241 of the 1,563 waste sites identified (15%) have been closed out. Of these, 195 of 733 waste sites (27%) have been closed out in the 100 and 300 Areas.

100 B/C Area pipeline remediation activities were initiated on February 26 (satisfying *Tri-Party Agreement* Milestone M-16-26D). Excavation of three concrete pipelines and three river outfall structures was completed during FY01.

Backfill of contaminated liquid waste sites and pipelines in the 100 D Area was completed on February 28, five months ahead of schedule (satisfying *Tri-Party Agreement* Milestone M-16-07B).

Backfill of contaminated liquid waste sites and pipelines in the 100 H Area was completed on July 19, two months ahead of schedule (satisfying *Tri-Party Agreement* Milestone M-16-26C).

Soil and pipeline remediation activities progressed in the 100 F Area. During FY01, over 335,000 metric tons (370,000 tons) of contaminated waste were removed and disposed in the Environmental Restoration Disposal Facility (ERDF). Since excavation activities began on July 27, 2000, nearly 395,000 metric tons (435,000 tons) have been removed and shipped to ERDF.

Demolition, size reduction, excavation, and shipment of highly contaminated debris and soil from the 116-N-3 Crib structure were completed, including 420 cover panels, girders, laterals, and the main distribution trough. Demolishing and processing the trough in-place, rather than cutting, lifting, and packaging trough sections, resulted in an estimated radiation dose reduction of 47%. This increased personnel safety due to the elimination of critical lifts at both the remediation site and ERDF. Remediation of the 116-N-3 effluent pipeline (including associated miscellaneous structures) and the 116-N-3 bypass structure was also successfully completed.

Regulator approval was received for the 300-FF-2 Operable Unit Record of Decision (ROD) on April 5. Approval of this ROD completes all required regulatory documents necessary to proceed with cleanup of remaining contaminated sites in the 300 Area.

The 300-FF-2 partitioning coefficient (Kd) uranium leachability study was initiated in March. The study was requested by the regulators to address uranium contamination mobility in the 300 Area. Preliminary leach and restoration data were collected and are being analyzed. The study is expected to be completed by August 2002.

Excavation activities were completed at the J.A. Jones waste site in March and 600-23 waste site on July 25 (satisfying *Tri-Party Agreement* Milestone M-16-41A).

Sampling and analysis were completed for 57 drums containing granular uranium oxide. The drums were shipped from the 618-4 Burial Ground to ERDF for disposal during September.

ACCOMPLISHMENTS continued: RAWD

An integrated procurement package was completed for the 618-4 and 618-5 Burial Ground drummed-waste remediation scope. During FY02, the 618-4 Burial Ground drums, which contain depleted uranium shavings and oil from past fuel production, will be removed and staged at ERDF until final disposition is determined.

ERDF:

On July 2, the five-year anniversary of ERDF disposal operations was observed, which also marked the achievement of no lost-time accidents by the ERDF team during this period. In addition, over 8.7 million kilometers (5.5 million miles) have been logged transporting contaminated waste to ERDF without an at-fault accident since ERDF began operations in July 1996. Constant focus on safety and excellent teamwork among the ERC Hanford Atomic Metal Trades Council (HAMTC) drivers/mechanics and subcontractor made this accomplishment possible.

Over 553,000 metric tons (610,000 tons) of contaminated waste were removed and disposed in ERDF during FY01. To date, over 2.8 million metric tons (3.2 million tons) of contaminated waste have been removed and disposed in ERDF since disposal operations began in July 1996.

Non-ER waste shipments were received and disposed in ERDF that consisted of ion exchange modules from K Basin and demolition debris from the Hanford Generating Plant.

Disposing of contaminated waste into ERDF Cell #3 began in June.

SAFETY/ISMS/CONDUCT OF OPERATIONS: RAWD

See Executive Summary.

BREAKTHROUGHS/OPPORTUNITIES FOR IMPROVEMENT: RAWD

Following is a summary of significant breakthroughs/opportunities for improvement identified during FY01:

Remote Panel Removal: Due to radiological concerns regarding demolition of the 116-N-3 Crib, the remediation subcontractor designed a "slide-on" clamp to be used with a crane to remotely lift the crib cover panels and place them in a size reduction area for processing. The original plan required laborers to walk on the crib for each lift to handle "tag" lines necessary for controlling the clamps. The crane engineer recommended the placement of "tag" lines rigged to the crane and controlled by the crane operator, thus eliminating the need for laborers to walk on the crib. This recommendation has resulted in a 100% remote panel removal operation and a significant reduction in personnel exposure.

Green

LONG-TERM (6 MONTHS PLUS) IMPORTANT ITEMS: RAWD

None identified at this time.

MAJOR COMMITMENTS (FISCAL YEAR PLUS 6 MONTHS): RAWD

- **DOE Secretarial:**

None identified at this time.

- **DOE EM Performance Agreement:**

None identified at this time.

MAJOR COMMITMENTS (FISCAL YEAR PLUS 6 MONTHS) continued: RAWD

- ***Tri-Party Agreement* Milestones:**

Milestone	Description	Due Date	(F) / (A) Date	
M-16-26D	Begin Excavation Activities at 100 B/C Process Effluent Pipelines.	2/28/01	2/26/01 (A)	
M-16-07B	Complete Remediation and Backfill of 22 Liquid Waste Sites and Process Effluent Pipelines in the 100-DR-1 and 100-DR-2 Operable Units as defined in Remedial Design Report/Remedial Action Work Plan for the 100 Area	7/31/01	2/28/01 (A)	
M-16-41A	Complete Remedial Action Excavation for JA Jones 1 and 600-23 Waste Sites	7/31/01	7/25/01 (A)	Green
M-16-26C	Complete Remediation and Backfill of 10 Liquid Waste Sites and Process Effluent Pipelines in the 100-HR-1 Operable Unit as defined in the Remedial Design Report/Remedial Action Work Plan for the 100 Area	9/30/01	7/19/01 (A)	
M-16-26G	Remove filter boxes and complete verification sampling for 100-B-12 waste site	9/30/01	5/31/01 (A)	
M-16-00F	Establish Date for Completion of all 100 Area Remedial Actions	12/31/01	12/31/01 (F)*	Yellow
M-16-41B	Submit Cleanup Verification Package (CVP) for JA Jones 1 and 600-23 Waste Sites for EPA Approval	3/31/02	11/16/01 (F)	
M-16-26B	Complete Remediation and Backfill of 51 Liquid Waste Sites in the 100-BC-1/-2, 100-DR-1/-2, and 100-HR-1 OUs and Process Effluent Pipelines in the 100-DR-1/-2, and 100-HR-1 OUs. Complete revegetation of 36 Liquid Waste Sites in the 100-BC-1, 100-DR-1/-2, and 100-HR-1 OUs as defined in the RDR/RAWP for the 100 Area.	3/31/02	3/31/02 (F)	Green

*Meetings were initiated in mid October with RL, EPA, and Ecology to review draft AIP and schedule addressing negotiation process for *Tri-Party Agreement* Milestones M-16 and M-93 for the 100 and 300 Areas. Target date for reaching agreement is December 31, 2001.

MAJOR COMMITMENTS (FISCAL YEAR PLUS 6 MONTHS) continued: RAWD

- **DNFSB Commitment:**

None identified at this time.

PERFORMANCE OBJECTIVES: RAWD

	Task	Status
RAWD	• 490,000 Tons by 9/30/01	Complete; Notice of Completion submitted on 10/17/01.
	• Backfill 16 Sites by 9/30/01	Complete; Notice of Completion submitted on 10/17/01.
	• 50,000 Additional Tons by 9/30/01 **(Stretch)**	Complete; Notice of Completion submitted on 10/17/01.
	CV <5.0%; SV <7.5% for grouped PBS ER01, ER03, ER04	Within thresholds.

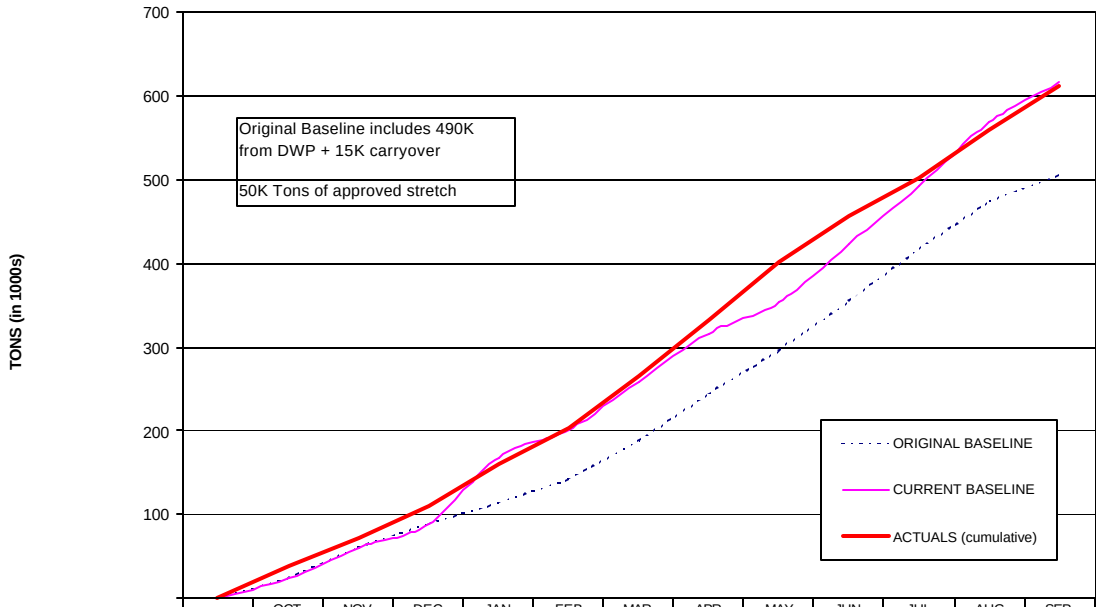
Green

PERFORMANCE MEASURES/METRICS: RAWD – (River and Plateau)

	DWP FY01	FY01 Mgmt Commitments	Current Baseline (Incl. Baseline Changes)	Completed YTD
Waste Sites Excavated	12	12	18	16

Green

Remedial Action and Waste Disposal Project
Cumulative Tons to ERDF



	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
ORIGINAL BASELINE	24	61	89	114	142	188	244	296	355	417	474	505
CURRENT BASELINE	24	61	89	169	201	259	316	353	423	491	568	615
ACTUALS (cumulative)	38	73	111	162	203	267	332	401	456	503	558	610

MONTH

STRETCH AND SUPERSTRETCH GOALS: RAWD

FY01 RAWD "Stretch" Goals	Approved Tons (K)
Remediate Additional 50K Tons of Contaminated Material by 9/30/01	
(1) Additional Contaminated Material at 100-F Pipelines (BCP 21013 approved 11/00)	8.0K
(2) Additional Contaminated Material at 100-H Sites (BCP 21014 approved 11/00)	7.5K
(3) (Additional Contaminated Material at 100-F Sites of 36.4 approved in February) (BCP 21043 approved 2/01)	34.5K
S/Total Remedial Action Stretch Goals:	**50.0K**

Green

*Complete, Notice of Completion submitted on 10/17/01.

STRETCH AND SUPERSTRETCH GOALS continued: RAWD

FY01 RAWD "Superstretch" Goals	Approved BCPs (K)
***Complete Remediation of 60 Square Miles of Hanford Site: (1) Complete Remediation of J.A. Jones Pit #1 and 600-23**	$1640.9K
S/Total Remedial Action Superstretch Goals:	**$1640.9K**

Green

*Carried over from FY00. Work complete; Notice of Completion submitted on 8/7/01 and approved on 10/11/01.

PROJECT STATUS (COST/SCHEDULE): RAWD

- **Schedule:**

Remedial Action & Waste Disposal Project	BCWS	BCWP	Variance
	$K	$K	$K
ER01 100 Area Remedial Actions	30,969	29,911	(1,058)
ER03 300 Area Remedial Actions	2,840	2,231	(609)
ER04 ER Waste Disposal	19,235	18,426	(809)
TOTAL Remedial Actions	**53,044**	**50,568**	**(2,476)**
Planned schedule variance/carryover			
Adjustment for ERDF Box 39 retrieval			200
Adjustment for ISS special funding impact on ERDF			92
Additional September funding/scope for 300 Area barrel removal acceleration			365
Effective schedule variance after adjustments			**(1,819)**

Green

PBS-ER01 – 100 Area Remedial Action
Schedule Variance = **($1058K); (3.4%)** [Last Month: ($730K); (2.7%)]

Cause: Pipeline excavation activities at 100-FR are behind schedule due to subcontractor termination delays and additional work on plume remediation; confirmation sampling activities and lab analysis work at 100-NR-1 is behind schedule due to discovery of plumes.

Resolution: FR pipeline work, closeout verification activities for 116-N-3, demolition activities for 116-N-1 trench, and 8,000 tons of 116-N-3 plume material have been identified as carryover to FY02.

PROJECT STATUS (COST/SCHEDULE) continued: RAWD

PBS-ER03 – 300 Area Remedial Action
Schedule Variance = **($609K); (21.4%)** [Last Month: ($375K); (16.8%)]
Effective Schedule Variance = **($244K); (9.8%)**

Cause: Delays in the 300-FF-1 remediation contract closeout due to loss of uranium chip disposal option and holdup on four cleanup verification package (CVP) approvals; planned carryover due to receipt of additional funding to accelerate the 618-4 Burial Ground.

Resolution: The CVPs are pending the U.S. Environmental Protection Agency (EPA) approval; regulatory work is underway to establish a staging area at ERDF and a transportation pathway for drum shipments. Remaining work identified as carryover to FY02.

PBS-ER04 – Environmental Restoration Waste Disposal
Schedule Variance = **($809K); (4.2%)** [Last Month: ($258K); (1.5%)]
Effective Schedule Variance = **($517K); (2.7%)**

Cause: Less waste transported for disposal than planned.

Resolution: Waste disposal will occur in FY02. Carryover.

- **Cost:**

Remedial Action & Waste Disposal Project	FY01 EAC	BCWP	ACWP	Variance
		$K	$K	$K
ER01 100 Area Remedial Actions	28,453	29,911	27,504	2,407
ER03 300 Area Remedial Actions	2,623	2,231	2,008	223
ER04 ER Waste Disposal	19,081	18,426	18,261	165
TOTAL Remedial Actions	**50,157**	**50,568**	**47,773**	**2,795**

Green

PBS-ER01 – 100 Area Remedial Action
Cost Variance = **$2407K; 8.0%** [Last Month: $1932K; 7.3%]

Cause: Less labor was required due to sharing DR site non-manual resources with the 100-BC work scope needs, shifting of personnel to other waste sites, less design and supervision required; DR backfill was completed six weeks early; subcontract costs at 100-BC-1 were less than planned.

Resolution: Reflected in the EAC.

Cause: CVPs continue to require less labor than anticipated to prepare due to the use of a "streamlined" format and the consolidation of waste sites. Estimated completion costs for the lead brick survey have been reduced to reflect actual charges.

Resolution: Reflected in the EAC.

PROJECT STATUS (COST/SCHEDULE) continued: RAWD

Cause: 100 Area Burial Ground Design costs were less than planned due to fewer drawings being required; less effort required to prepare the Sampling and Analysis Plan (SAP) due to consorted efforts in the Data Quality Objective (DQO) process. Offsetting overrun at 100-NR-1 due to impacts of contamination levels and control issues.

Resolution: Reflected in the EAC.

PBS-ER03 – 300 Area Remedial Action
Cost Variance = **$223K; 10.0%** [Last Month: $91K; 4.9%]

Cause: Coordination of 300-FF-2 and 100 Area Burial Grounds design efforts has resulted in savings; savings from reduced integration requirements for preparation of the Kd sampling and analysis plan.

Resolution: Reflected in the EAC.

PBS-ER04 – Environmental Restoration Waste Disposal
Cost Variance = **$165K; 0.9%** [Last Month: $387K; 2.3%]

Cause: Project Support needs were less than anticipated; offset by increased labor and subcontract costs due to overtime being utilized to transport waste volumes from plumes.

Resolution: Reflected in the EAC.

REGULATORY ISSUES: RAWD

***Tri-Party Agreement* Milestone M-16-00F - Establish Date for Completion of All 100 Area Remedial Actions:** This milestone is due on December 31, 2001 and will develop the date and workscope for any remaining remedial actions in the 100 Area. Currently, most of these remedial actions are in the 100 Area Long Range Plan (miscellaneous pipelines are still being developed). *Tri-Party Agreement* Major Milestone M-16-00 compliance date is September 30, 2018.

Yellow

Status: Meetings were initiated in mid October with RL, the U.S. Environmental Protection Agency (EPA), and the Washington State Department of Ecology (Ecology) to review draft Agreement in Principle (AIP) and schedule addressing negotiation process for *Tri-Party Agreement* Milestones M-16 and M-93 for the 100 and 300 Areas. Target date for reaching agreement is December 31, 2001.

EXTERNAL ISSUES (i.e. HAB, Congress, etc.): RAWD

None identified at this time.

DOE-RL & HQ ISSUES/REQUESTS (not covered elsewhere): RAWD

None identified at this time.

INTEGRATION ACTIVITIES: RAWD

Green

Following is a summary of significant integration activities identified during FY01:

A Memorandum of Understanding (MOU) was signed with Energy Northwest for transportation and disposal of contaminated Hanford Generating Plant demolition wastes. During FY01, 2,732 metric tons (3,012 tons) of waste/debris were disposed in ERDF.

Ten ion exchange modules from K Basin were disposed in ERDF during FY01.

Benchmarking efforts were initiated between Hanford, Oak Ridge, and Idaho National Engineering and Environmental Laboratory (INEEL) for transuranic (TRU) waste retrieval activities at each of the sites.

Decommissioning Projects (D&D)

SECTION B – RESTORING THE RIVER CORRIDOR

**Data as of month-end September (unless otherwise noted).
Key data as of October 25, 2001.**

Decommissioning Projects (D&D)

ACCOMPLISHMENTS: D&D

A number of significant Decommissioning (D&D) Project accomplishments were achieved during FY01. Primary emphasis in FY01 was placed on interim safe storage (ISS) of four reactors and decommissioning of the 233-S facility. Accomplishments are summarized below.

General Reactor ISS:

Since work began on the reactor ISS project almost seven years ago, there has not been a single lost time injury. Work has been performed for almost five years without a contamination event.

F and DR Reactor ISS:

All concrete pourbacks were completed at F and DR Reactors in January. The safe storage enclosure (SSE) contract was awarded for the F and DR Reactor roofs in May. At the end of September, F Reactor ISS activities were 77% complete; DR Reactor ISS activities were 90% complete. F Reactor ISS is planned for completion by September 2003, as scheduled; DR Reactor ISS is planned for completion by September 2002, three years ahead of schedule.

F Reactor fuel storage basin (FSB) upper fill removal was completed during January. A 330N Brokk™ remote-controlled excavator was mobilized in the FSB during June to assist with sample collection and removal of high contamination areas within the remaining one meter (three feet) of sand and contaminated debris.

D and H Reactor ISS:

During October 2000, regulator approval was received for implementing the D and H Reactors' Action Memorandum.

All planned FY01 ISS activities were completed for D Reactor, including hazardous material removal, asbestos abatement, liquid pipe checks, and pipe/equipment removal. D Reactor demolition operations started in February. Above/below-grade demolition preparation activities were completed within the FSB during September. Backfill operations were also completed in the valve pit/supply fan area. At the end of September, D Reactor ISS activities were 47% complete. D Reactor ISS is planned for completion by September 2003, four years ahead of schedule.

All planned FY01 ISS activities were completed for H Reactor, including hazardous material removal, asbestos abatement, liquid pipe checks, and pipe/equipment removal. At the end of September, H Reactor ISS activities were 19% complete. H Reactor ISS is planned for completion by September 2004, five years ahead of schedule.

233-S Plutonium Concentration Facility:

During FY01, a total of 3,382 entries was made into the highly contaminated 233-S facility with no significant radiological events occurring. Throughout the four years of 233-S facility decommissioning, over 10,000 entries have been made without any significant radiological occurrences. Confined workspace environments and contamination hazards are encountered during each entry where decommissioning activities are being performed.

Nine process hood vessels were removed on or ahead of schedule. Originally, only three vessels were planned for removal in FY01. A total of 15 vessels is planned for removal by June 2002.

ACCOMPLISHMENTS continued: D&D

Removal of 492 meters (1,613 feet) of process hood piping was completed.

Nondestructive assay of 753 waste packages was completed.

Other:

Of the 778 Hanford Site surplus facilities identified in the ER long range plan, 31 have been fully decommissioned to date (excludes reactor ISS facilities). This constitutes about 4% of the total facilities.

SAFETY/ISMS/CONDUCT OF OPERATIONS: D&D

See Executive Summary.

BREAKTHROUGHS/OPPORTUNITIES FOR IMPROVEMENT: D&D

None identified at this time.

LONG-TERM (6 MONTHS PLUS) IMPORTANT ITEMS: D&D

None identified at this time.

MAJOR COMMITMENTS (FISCAL YEAR PLUS 6 MONTHS): D&D

- **DOE Secretarial:**

None identified at this time.

- **DOE EM Performance Agreement:**

None identified at this time.

- ***Tri-Party Agreement* Milestones:**

Milestone	Description	Due Date	(F)/(A) Date
M-93-12	Issue 105-DR Disposition Competitive Procurement Package for Ascertaining the Most Effective and Efficient Approach to FEIS ROD Selected Alternative Implementation (....)	2/28/02	*TBD

Green

*Meetings were initiated in mid October with RL, EPA, and Ecology to review draft AIP and schedule addressing negotiation process for *Tri-Party Agreement* Milestones M-16 and M-93 for the 100 and 300 Areas. Target date for reaching agreement is December 31, 2001.

- **DNFSB Commitment:**

None identified at this time.

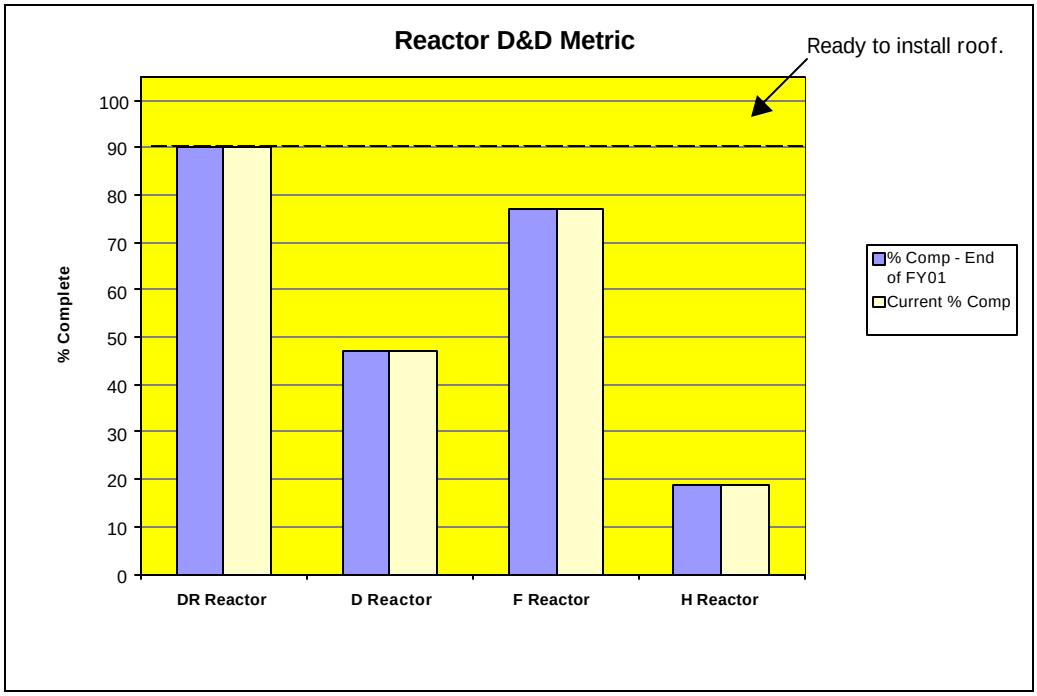
PERFORMANCE OBJECTIVES: D&D

PI	Task	Status
233-S	• 8 vessels by 6/30/02 • 7 additional vessels by 6/30/02 **(Stretch)** CV <5.0%; SV <7.5% for PBS ER-06	Critical path activity on schedule. NDA issue is impacting cost. Currently being reviewed by RL, BHI, and FH. BCP-21023 approved. Stretch activities in progress and on schedule.
ISS	• D Reactor Major Tasks by 9/30/01 • DR Reactor Major Tasks by 9/30/01 • H Reactor Major Tasks by 9/30/01 *F Reactor major tasks were revised from "by 9/30/01" to "11/30/01" per BCP 21187. Task has been removed from BHI's FY01 PIs. CV <5.0%; SV <7.5% for PBS ER-06	*Notice of Completion submitted on 10/17/01.

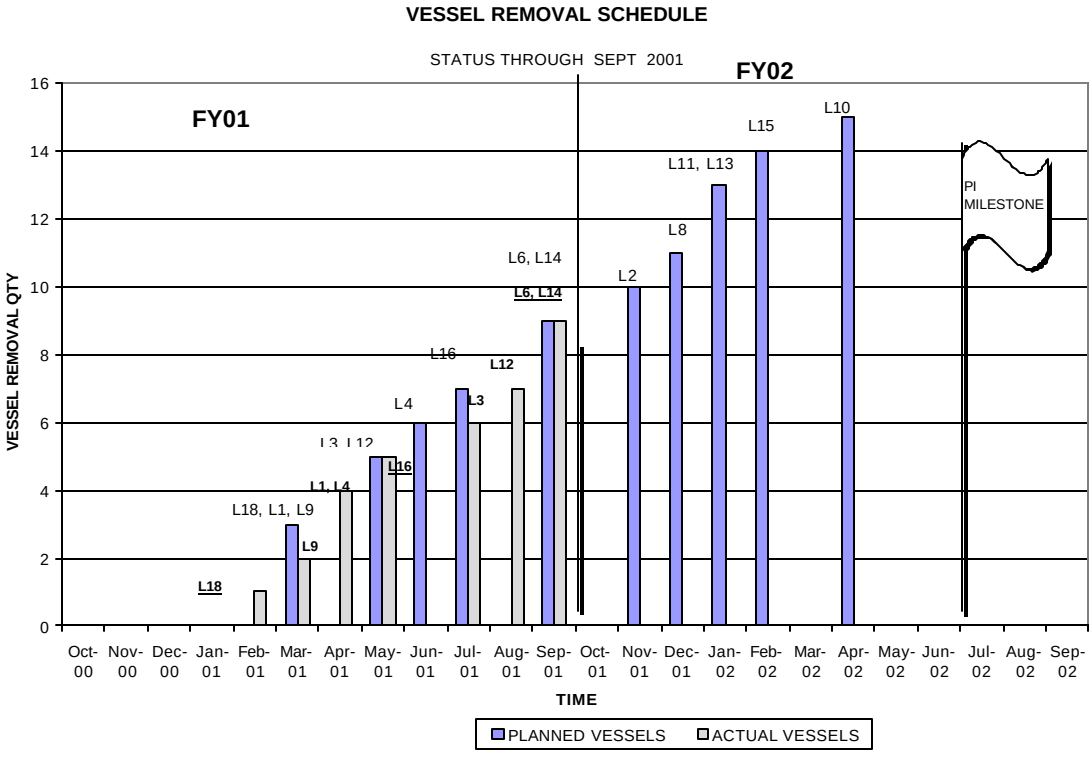
Green

PERFORMANCE MEASURES / METRICS: D&D

Green



*Note: End of FY01 percent complete was adjusted per BCPs: 21175, 21176, and 21187.



STRETCH AND SUPERSTRETCH GOALS: D&D

FY01 D&D "Stretch" Goals	Approved BCPs (K)
Remove 7 Additional Vessels by 6/30/02 for a total of 15 Vessels (Stretch Only) (BCP 21023 approved 11/00)	$1,072.0K
S/Total D&D Stretch Goals:	**$1,072.0K**

Green

FY01 D&D "Superstretch" Goals	Approved BCPs (K)
***Continue F Reactor Interim Safe Storage**	$1372.4K
S/Total D&D Superstretch Goals:	**$1372.4K**

Green

*Carried over from FY00. Completed – Notice of Completion submitted on 5/3/01 and approved on 7/16/01.

PROJECT STATUS (COST/SCHEDULE): D&D

- **Schedule:**

Decommissioning Projects	BCWS	BCWP	Variance
	$K	$K	$K
ER06 ISS and Other D&D Projects	16,997	12,041	(4,956)
ER06 233-S	7,096	6,651	(445)
TOTAL D&D	**24,093**	**18,692**	**(5,401)**
Planned schedule variance/carryover			
Adjustment for congressional funding/scope			3,300
Adjustment for excavator purchase			1,212
Effective schedule variance after adjustments			**(889)**

Green

PBS-ER06 – Decontamination and Decommissioning
Schedule Variance = **($5401K); (22.4%)** [Last Month: ($296K); (1.8%)]
Effective Schedule Variance = **($889K); (4.5%)**

Cause: FY01 ER work scope savings allowed for purchase of an excavator that is scheduled for arrival in December requiring planned carryover to FY02.

Resolution: Purchase is on schedule for FY02 delivery; FY01 carryover item.

Cause: Congressional funding for F Reactor ISS was received in late September. A baseline change proposal (BCP) was approved in FY01 accelerating the scope into the funding year; work will be performed in FY02 as carryover scope.

Resolution: Work scope is planned as carryover.

Cause: Process hood difficulties on accelerated plan due to difficulty in removing neutron monitors, stringent procedures slowed TRU waste shipments, nondestructive assay (NDA) labor support was not available, and late start of concrete drilling for ventilation modification. Because of acceleration to meet stretch PI objectives, the overall project completion is approximately twelve months ahead of original three-year baseline schedule.

Resolution: Work scope has been identified as carryover.

PROJECT STATUS (COST/SCHEDULE) continued: D&D

- **Cost:**

Decommissioning Projects	FY01 EAC	BCWP	ACWP	Variance
		$K	$K	$K
ER06 ISS and Other D&D Projects	17,194	12,041	12,151	(110)
ER06 233-S	7,357	6,651	6,899	(248)
TOTAL D&D	**24,551**	**18,692**	**19,050**	**(358)**

Green

PBS-ER06 – Decontamination and Decommissioning

Cost Variance = **($358K); (1.9%)** [Last Month: ($438K); (2.7%)]

Cause: Overrun at the F Reactor FSB due to resolving work package issues while work was on hold; procedural changes resulting in loss in efficiency in removing material from the FSB; and equipment breakdown, weather conditions, and cleaning out hotspots in the FSB; overrun from a charging practice adjustment; offsetting cost underruns at D, DR, and H ISS projects due to less effort required than planned.

Resolution: Additional costs have been trended and are reflected in the EAC.

Cause: Overrun at the 233-S Facility due to higher than planned purchase cost of Standard Waste Boxes (SWB) and purchase of additional tools needed for process hood pipe and vessel removal; offset by underrun in NDA work and reduction in non-manual labor requirements.

Resolution: Overrun has been partially reflected in the EAC.

REGULATORY ISSUES: D&D

D and H Reactor Impacts of *Tri-Party Agreement* Milestones: The acceleration of the reactor ISS projects is no longer consistent with the current M-93 milestones, especially the competitive procurement and renegotiating milestone (M-93-12) for DR Reactor.

Green

Status: Meetings were initiated in mid October with RL, EPA, and Ecology to review draft AIP and schedule addressing negotiation process for *Tri-Party Agreement* Milestones M-16 and M-93 for the 100 and 300 Areas. Target date for reaching agreement is December 31, 2001.

Fuel Element Discovery: The discovery of a fifth fuel element in the F Reactor FSB was confirmed on September 26.

Green

Status: The auditable safety analysis (ASA) limit for fuel in the basin is currently five elements. Several other document, in addition to the ASA, must be revised to reflect the higher than anticipated number of fuel elements found before intrusive work can continue. The project is developing a Management of Change (MOC) to the ASA, updating the calculations in the air monitoring plan, and revising the lower fill work package to reflect the increased number of elements. When complete, the elements will be shipped to K Basin (in accordance with the previously approved Safety Analysis Report Plan [SARP], which is not impacted by the new number). K Basin personnel have been notified that fuel may be ready for shipment as early as October. They are finalizing their receiving procedure.

Increased Hot Spots and Radiation Levels: The number of hot spots currently found in F Reactor FSB (13 to date) and the radiation levels exceed the assumptions made during preparation of the current cleanout schedule. This is causing:

Green

- Increased radiation monitoring and survey documentation
- Revised As Low as Reasonably Achievable (ALARA) planning and dose estimates (tracking individual dose of personnel)
- Excavation taking longer due to hot spot removal in larger areas
- High radiation area control constant versus sporadic (as planned)

Status: Each hot spot is worked as it is verified, refining techniques for hot spot excavation, and basket and debris removal.

EXTERNAL ISSUES (i.e. HAB, Congress, etc.): D&D

None identified at this time.

DOE-RL & HQ ISSUES/REQUESTS (not covered elsewhere): D&D

233-S Process Hood: 232 items of nondestructive assay (NDA) information previously provided by Fluor Hanford (FH) Plutonium Finishing Plant (PFP) in final data reports are invalid because of calibration errors that occurred in May 1999.

Yellow

Status: BHI has received tabulated results for ~660 NDA data items. This includes the initial 232 and ~430 outstanding PFP developed NDA items. Examination of these results confirms that no authorization basis limits were exceeded. Not all of the completed data packages and calculation materials for these items have been provided, per the original Work Order and Letter of Instruction (LOI). BHI has also developed a plan and received approval to exhume and reanalyze the worst-case container at ERDF.

INTEGRATION ACTIVITIES: D&D

Green

Following is a summary of significant integration activities identified during FY01:

K Basin requirements were coordinated with Fluor Hanford in support of pending fuel element shipments from F and H Reactor FSB demolition.

Other Hanford Site Work:

- Demolition of the 384 Oil Bunker Tank (300 Area) was completed on July 17, including demobilization.
- The estimate for the 331-B building demolition workscope in the 300 Area was completed and transmitted to Pacific Northwest National Laboratory (PNNL) in August. This demolition work is tentatively scheduled to be performed in FY02.
- Above-grade demolition of the 303-K building (FH building located in the 300 Area) was completed in September.

Program Management and Support (PM&S)

SECTION B – RESTORING THE RIVER CORRIDOR

**Data as of month-end September (unless otherwise noted).
Key data as of October 25, 2001.**

Program Management & Support (PM&S)

ACCOMPLISHMENTS: PM&S

FY01 SUMMARY

A number of significant Program Management and Support (PM&S) Project accomplishments were achieved during FY01. These accomplishments are summarized below by functional organization.

Compliance, Quality, Safety, and Health:

A safety standdown was conducted for all ERC employees in April. Statistics indicate that during the spring and summer months an increased number of injuries are sustained both on and off the job. During the standdown, ERC employees were asked to rededicate themselves to making safety a personal value. Discussions centered on how ERC employees can commit to being injury free each and every day for the welfare of their families, coworkers, and themselves.

Program and Project Support:

All FY01 small business socioeconomic contractual goals were exceeded. Small, small disadvantaged, and women-owned small business prime contract goals have been met or exceeded for the entire seven years of BHI's prime contract.

Engineering and Technology:

The annual Hanford Site Waste Management Units Report was completed and placed on the Internet satisfying *Tri-Party Agreement* Commitment Milestone C-10-08, three weeks ahead of schedule.

A national pollution prevention award was received for implementation of the Small Diameter Geophysical Logging System. BHI also received a runner-up award for using value methodology in assessing waste minimization opportunities.

FY01 waste minimization efforts identified approximately $25M in potential life-cycle cost avoidance. From 1994 through 2001, waste minimization cost avoidance efforts are estimated to have potential life-cycle cost avoidance of greater than $100M. Techniques used to accomplish waste minimization include recycling, separating or isolating contaminated material from noncontaminated material, and eliminating or reducing waste generated at the source.

A contract was awarded to plant 2,600 sagebrush tublings on waste sites remediated by the ERC. These sites were hydroseeded with native grasses, forbs, and shrubs in December 1999. The sagebrush planting completes the final phase of revegetation for these remediated sites. The revegetation activities are part of the ERC's ongoing efforts to mitigate habitat damaged from past Hanford Site operations. In addition, seed from native shrubs, including sagebrush and rabbitbrush, was gathered for use in future ERC revegetation efforts. A portion of the sagebrush seed will be sent to native plant nurseries for plant propagation.

ACCOMPLISHMENTS continued: PM&S

Planning and Controls:

The ER Project Baseline Update and FY02 PBS/WBS summary documentation were submitted in January as planned.

FY02 Detailed Work Plan (DWP) management review meetings were conducted with ERC, RL, HQ, regulators, and stakeholders. The DWP forms the basis and assumptions for all ER work for the given year. The FY02 DWP was completed on September 25, as planned.

The FY03 budget development effort was completed. Tasks included Integrated Priority List (IPL) input/update of unit of analysis data; creating/reviewing the FY02-FY03 budget authority crosscutting cost data; and entering FY03 budget data into the DOE HQ's Integrated Planning, Accountability, and Budgeting System (IPABS). Support was also provided for various FY02 funding exercises as requested by RL and HQ.

SAFETY/ISMS/CONDUCT OF OPERATIONS: PM&S

See Executive Summary.

BREAKTHROUGHS/OPPORTUNITIES FOR IMPROVMENT: PM&S

None identified at this time.

LONG-TERM (6 MONTHS PLUS) IMPORTANT ITEMS: PM&S

Six Sigma:

Green

- Implementation of Six Sigma program across the ERC continues.
- Four ERC managers completed Yellow Belt Champion training.
- 17 ERC employees, and one DOE-RL employee completed a 2-day followup Yellow Belt training (summit).
- The *ERC Waste Management PIP* (PIP #1) was completed in April 2001.
- The *ERC Procedures Development PIP* (PIP #2) was completed in June 2001.
- The *Radiation Control Instrumentation PIP* (PIP #3) is in the “Control Phase” and is about 99% complete.
- The *Contaminated Concrete Demolition PIP* (PIP #4) is in the “Measure Phase” and is about 15% complete.
- The "Nevada Test Site/Hanford Site Virtual Waste Acceptance Process" report was issued on September 28, 2001.

MAJOR COMMITMENTS (FISCAL YEAR PLUS 6 MONTHS): PM&S

- **DOE Secretarial:**

None identified at this time.

- **DOE EM Performance Agreement:**

None identified at this time.

- ***Tri-Party Agreement* Milestones:**

None identified at this time.

- **DNFSB Commitment:**

None identified at this time.

PERFORMANCE OBJECTIVES: PM&S

Comprehensive Measures

Comprehensive Measure	Task	Status
Safety	• The Contractor shall protect worker safety and health, public safety and health, and the environment.	Notice of Completion submitted on 10/18/01.
Operational Excellence	• Migrate systems to facilitate PBS restructuring in FY02 • Rebaseline completed per Baseline Updating Guidance (BUG) • Integrate technology into Projects • Achieve pollution prevention/waste minimization	Notice of Completion submitted on 9/28/01. Notice of Completion submitted on 2/14/01. Notice of Completion submitted on 10/17/01. Notice of Completion submitted on 10/18/01.
Effective Leadership	• Management Effectiveness • Customer Satisfaction • Effective Financial Management • Cost/Price Analysis	Notice of Completion submitted on 10/18/01 Notice of Completion submitted on 10/18/01. Notice of Completion submitted on 10/18/01. Notice of Completion submitted on 10/17/01.

Green

PERFORMANCE MEASURES/METRICS: PM&S

During FY01, a total of 22 technology deployments were completed. FY01 performance measure identified 5 technologies to be deployed. Of the 22 deployments, 17 were first-time (new PBS) technology deployments. These deployments were instrumental in providing efficiencies in the efforts of waste site characterization and remediation, groundwater monitoring and sampling, and reactor ISS activities.

Technology Deployment	PBS	(F)/(A) Date
Polyshield SS-100 Fixative	RL-ER01	12/00 (A)
Electronic Dosimeter and Remote Monitoring System	RL-ER01	1/01 (A)
Surveillance and Measurement Model 935	RL-ER01	5/01 (A)
Alpha-Environmental Continuous Air Monitor	RL-ER01	9/01 (A)
Guzzler Vacuum Truck	RL-ER03	2/01 (A)
Electronic Dosimeter and Remote Monitoring System	RL-ER02	7/01 (A)
Helium Soil Gas Analysis for Determination of Tritium Plumes	RL-ER08	5/01 (A)
Colloidal Borescope	RL-ER08	5/01 (A)
ICP/MS for Uranium Isotopes in Groundwater	RL-ER08	5/01 (A)
Water Flux Meter	RL-ER08	7/01 (A)
Subsurface CO_2 Sampling System	RL-ER08	7/01 (A)
ConeSipper Deployed on Cone Penetrometer	RL-ER08	9/01 (A)
Advanced Tensiometer	RL-VZ01	7/01 (A)
Ultrasonic Liquid Level Detection	RL-ER06	2/01 (A)
Electronic Dosimeter and Remote Monitoring System	RL-ER06	5/01 (A)
Remote Retrieval System (Brokk ™ 330N with appropriate attachments)	RL-ER06	6/01 (A)
Compact Remote Console	RL-ER06	6/01 (A)
Oxy-Gas Torch	RL-ER06	1/01 (A)
3D Visual and Gamma Imaging System (Gamma Cam)	RL-ER06	2/01 (A)
In Situ Object Counting System (ISOCS)	RL-ER06	2/01 (A)
Laser-Assisted Ranging and Data System	RL-ER06	3/01 (A)
Electronic Dosimeter and Remote Monitoring System	RL-ER06	7/01 (A)

Green

STRETCH AND SUPERSTRETCH GOALS: PM&S

None identified at this time.

PROJECT STATUS (COST/SCHEDULE): PM&S

- **Schedule:**

Program Management & Support	BCWS	BCWP	Variance
	$K	$K	$K
ER10 ERC Program Management & Support	31,249	30,009	(1,240)
ER10 RL Program Management & Support	5,564	4,596	(968)
TOTAL PM&S	**36,813**	**34,605**	**(2,208)**
Planned schedule variance/carryover			
Adjustment for Performance Fee (partial)			1,093
Adjustment for Hanford site-wide assessments			968
Effective schedule variance after adjustments			**(147)**

Green

PBS-ER10 – Program Management and Support
Schedule Variance = **($2208K); (6.0%)** [Last Month: ($1973K); (6.0%)]
Effective Schedule Variance = **($147K); (0.4%)**

Cause: FY01 performance fee accounting practice dictates proportional carryover.

Resolution: N/A

Cause: Late billing to RL on site-wide assessments.

Resolution: RL is discussing billing/timing with other site contractors/government agencies.

- **Cost:**

Program Management & Support	FY01 EAC	BCWP	ACWP	Variance
		$K	$K	$K
ER10 ERC Program Management & Support	29,056	30,009	27,638	2,371
ER10 RL Program Management & Support	5,564	4,596	4,596	0
TOTAL PM&S	**34,620**	**34,605**	**32,234**	**2,371**

Green

PBS-ER10 – Program Management and Support
Cost Variance = **$2371K; 6.9%** [Last Month: $1177K; 3.8%]

Cause: Records and Document Control, Procurement, and Design Engineering support needs were less than anticipated.

Resolution: Underrun has been trended and is reflected in the EAC.

REGULATORY ISSUES: PM&S

None identified at this time.

EXTERNAL ISSUES (i.e. HAB, Congress, etc.): PM&S

None identified at this time.

DOE-RL & HQ ISSUES/REQUESTS (not covered elsewhere): PM&S

None identified at this time.

INTEGRATION ACTIVITIES: PM&S

Following is a summary of significant integration activities identified during FY01:

Green

Safety and Health:
Bechtel Hanford, Inc. actively supported the DOE ISMS Workshop held in Pasco, Washington on December 5-6. 31 BHI personnel registered for the workshop, and a poster display was developed. BHI gave five presentations, and five individuals served as Breakout Session Coordinators/Support Personnel. BHI's President participated in the Environmental Management panel discussion.

BHI support to the Hanford Site multi-contractor technical exchange group continued on reuse, recycle, and release issues, including proposed modifications to DOE 5400.5, Radiation Protection of the Public and the Environment. Several meetings were held to integrate site application requirements.

BHI RadCon organization presented a technical seminar to the Hanford Site's health physicists on the "Advanced Characterization System Deployments and Lessons Learned."

A presentation was made to RL on the systematic approach used to develop the BHI Integrated Environment, Safety, and Health Management System (ISMS) metrics. RL requested that BHI provide a similar presentation to other Hanford Site contractors.

Engineering and Technology:
Engineering supported the value engineering study sponsored by Fluor Hanford's (FH) River Corridor Project (RCP) group to streamline configuration management requirements RCP will use in the future. Per RCP group's request, Engineering compiled a list that summarizes requirements for transferring a facility from FH to BHI.

A herbicide spray schedule was completed for the Hanford waste sites. BHI worked with FH, and CH2M Hill Hanford Ground, Inc. (CHG) to integrate spraying activities and maximize effectiveness of equipment and personnel resources across the Hanford Site.

A Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) training module was developed and presented to contractors and DOE personnel at the DOE's Paducha Site in Kentucky. The training module, requested by the Paducha ER Program, focused on the ER lessons learned and streamlining successes achieved at the Hanford Site during the past six years.

BHI facilitated the development of site-wide criteria to determine which regulatory agency enforcement action letters require notification to DOE under DOE Order 232.1A. This issue was addressed by the Central Environmental Committee (CEC), which is composed of Hanford Site contractor representatives. The approved approach establishes a clear hierarchy of agency enforcement actions that will be used to distinguish between “formal notifications” that require reporting under DOE Order 232.1A and “informal notifications” that do not trigger reporting under this Order and ensures consistency among the Hanford Site contractors. On January 18, this approach was formerly transmitted to RL/Office of River Protection (ORP) from the CEC with effective date of February 1.

INTEGRATION ACTIVITIES continued: PM&S

BHI worked with FH to establish a recycling credit for the Hanford Site's sanitary waste stream. The sanitary waste is hauled to the Roosevelt landfill where it is used to generate electricity from the methane gas produced. A 70% recycling credit was given for the Site's sanitary waste. This recycling effort will exceed the Secretary of Energy's goal to reduce sanitary waste by 50% before 2006.

Green

Environmental Management Performance Report

November 2001

Section C - Central Plateau Information

- Groundwater/Vadose Zone Integration Project
- Surveillance/Maintenance & Transition Projects

RCT Survey Scan for Rebar at 276-U

202-S REDOX Silo Roof Removal

Air Rotary Drilling at SX Tank Farm

Focused on Progress...
Focused on Outcomes!

Data as of month-end September (unless otherwise noted).
Key data as of October 25.

Department of Energy
Richland Operations Office

Bechtel Hanford, Inc.
Environmental Restoration Contractor

E0111012.2

Groundwater/Vadose Zone Integration Project (GW/VZ)

SECTION C – TRANSITIONING THE CENTRAL PLATEAU

**Data as of month-end September (unless otherwise noted).
Key data as of October 25, 2001.**

Groundwater/Vadose Zone Integration Project(GW/VZ):

ACCOMPLISHMENTS: GW/VZ

A number of significant GW/VZ Integration Project accomplishments were achieved during FY01. These accomplishments are summarized below.

Groundwater/Vadose Zone:

An 18-month review was completed of the Science and Technology (S&T) portion of the Hanford Site Integration Project. The S&T Program received positive marks from the review conducted by the National Research Council, which is a part of the National Academy of Sciences. A formal report, Science and Technology for Environmental Cleanup at Hanford, was issued in August.

Three meetings were held with the Integration Project Expert Panel. The meetings focused on Columbia River issues, Integration Project status and transition strategies, and the System Assessment Capability (SAC) initial assessment rollout, respectively.

History-matching activities were completed for vadose zone, groundwater, and Columbia River technical elements in preparation for running the SAC model, from periods 1944 to 2000, to test integrated performance. The initial SAC Rev. 0 assessment was started in May. The SAC is being designed to provide a cumulative assessment of the impacts and risks associated with Hanford Site contaminants.

Biological fate and transport experiments were initiated. These experiments will help determine the impacts of technetium-99 on aquatic species.

The Integration Project's first module of the virtual library was deployed in August. The virtual library is a Web-based application that provides data important for Hanford Site characterization and contaminant transport modeling. The virtual library was designed to support specific work processes at the Hanford Site, such as generation of remedial investigation reports. It also provides simple analytical tools, such as trend charts and statistical reports.

The fifth semi-annual groundwater/vadose zone report was completed and distributed to Congress in July. The report provides an overview of the progress made from October 2000 through March 2001 to protect the Columbia River from radiological and chemical constituents in Hanford's groundwater and vadose zone.

Groundwater Management:

The In Situ Redox Manipulation (ISRM) Project Phase I barrier emplacement was completed on November 1, 2000, two months ahead of schedule, satisfying *Tri-Party Agreement* Milestone M-16-27A.

The ISRM Project Phase II / III drilling subcontract was awarded in December 2000. ISRM Phase II was initiated in January and is planned for completion in December 2001. Phase II consists of installing 32 wells (28 barrier wells and 4 compliance monitoring wells) parallel to the Columbia River. During FY01, all 32 wells were installed and 28 wells were chemically injected, as planned. Chemical withdrawals are ongoing. These well installations extended the subterranean chemical barrier to approximately 479 meters (1,570 feet) to support the mitigation of chromium migration to the Columbia River. Phase III will consist of installing approximately 18 wells and will extend the barrier to approximately 702 meters (2,300 feet). The ISRM technology involves injecting a chemical (sodium dithionite) into an aquifer to create a chemically-altered treatment zone. Studies completed to date indicate that when contaminated groundwater passes through the permeable chemical zone (barrier) hexavalent chromium is converted to trivalent chromium, a significantly less toxic and less mobile form of chromium.

ACCOMPLISHMENTS continued: GW/VZ

Installation of a total of 21 *Resource Conservation and Recovery Act of 1976* (RCRA) groundwater monitoring wells were completed during FY01. The first ten RCRA wells were installed by December 2000 (satisfying *Tri-Party Agreement* Milestone M-24-00L). Five more RCRA wells were installed by early April 2001 in support of *Tri-Party Agreement* Milestone M-24-00M. Six additional wells were installed by September 2001 (three months ahead of schedule), that also support *Tri-Party Agreement* Milestone M-24-00M. These last six wells were installed in support of the Office of River Protection (ORP).

Decommissioning of all 90 wells was completed as planned for FY01. Completion of some of these wells also marked completion of groundwater cleanup activities of the first section of the Columbia River corridor, which consists of a 36-square-kilometer (14-square-mile) section known as Phase 1A.

Initial assessment (soil gas sampling and groundwater grab sampling activities) of the tritium plume from the 618-11 Burial Ground was completed during FY01. This investigation revealed a narrow plume of limited areal extent. Four wells were installed which will enable continued monitoring of this site.

All five groundwater pump and treat systems operated above the planned 90% availability during FY01 (98% actual; 90% planned). The pump and treat systems remove contaminants (carbon tetrachloride, strontium, and chromium) from the groundwater and mitigate migration to the Columbia River. Approximately 1.1 billion liters of groundwater were processed during FY01; over 5.4 billion liters of groundwater have been processed to date.

The 200-ZP-2 vapor extraction system was restarted in April as planned. Approximately 2.5 billion liters of vapor were processed through the 200-ZP-2 soil vapor extraction system during FY01, removing 709 kilograms of carbon tetrachloride.

200 Area Assessments:

Regulator approval was received for the 200-CS-1 Chemical Sewer Group and 200-CW-5 U Pond/ Z Ditches Cooling Water Group Operable Unit Work Plans Rev 0. in October 2000. The regulators also approved the 200-CW-1 Gable Mountain/B Pond Operable Unit Rev. 0 Work Plan in December 2000.

The 200-PW-2 Uranium-Rich Process Waste Group Operable Unit Work Plan Rev. 0 was transmitted to the regulators in July.

The 200-TW-1 Scavenged Waste Group and 200-TW-2 Tank Waste Group Operable Units drilling, sampling, and geophysical borehole operations were completed. 200-TW-1 activities were completed more than three months ahead of schedule, satisfying *Tri-Party Agreement* Milestone M-15-41A. 200-TW-2 activities were completed one month ahead of schedule, satisfying *Tri-Party Agreement* Milestone M-15-42A.

SAFETY/ISMS/CONDUCT OF OPERATIONS: GW/VZ

See Executive Summary.

BREAKTHROUGHS/OPPORTUNITIES FOR IMPROVEMENT: GW/VZ

None identified at this time.

LONG-TERM (6 MONTHS PLUS) IMPORTANT ITEMS: GW/VZ

None identified at this time.

MAJOR COMMITMENTS (FISCAL YEAR PLUS 6 MONTHS): GW/VZ

- **DOE Secretarial:**

None identified at this time.

MAJOR COMMITMENTS (FISCAL YEAR PLUS 6 MONTHS) continued: GW/VZ

- **DOE EM Performance Agreement:**

None identified at this time.

- ***Tri-Party Agreement* Milestones:**

Milestone	Description	Due Date	(F) / (A) Date	
M-13-00K	Submit One 200 NPL RI/FS (RFI/CMS) Work Plan	12/31/00	12/21/00 (A)	
M-13-25	Submit Uranium Rich Process Waste Group (200-PW-2) Work Plan	12/31/00	12/21/00 (A)	
M-24-46	Install Three Additional Wells at SST WMA S-SX	12/31/00	12/27/00 (A)	
M-24-47	Install Four Additional Wells at SST WMA T	12/31/00	12/27/00 (A)	
M-24-48	Install Three Additional Wells at SST WMA TX-TY	12/31/00	12/27/00 (A)	
M-24-00L	Install RCRA Groundwater Monitoring Wells at the Rate of up to 50 in Calendar Year 2000 if Required	12/31/00	12/27/00 (A)	
M-16-27A	Complete 100-HR-3 Phase I, ISRM Barrier Emplacement	12/31/00	11/01/00 (A)	Green
M-24-49	Install Three Additional Wells at SST WMA S-SX	4/30/01	3/30/01 (A)	
M-24-50	Install Two Additional Well at SST WMA TX-TY	4/30/01	4/02/01 (A)	
M-15-41A	Complete 200-TW-1 OU Field Work through Drilling and Sample Collection	10/31/01	07/20/01 (A)	
M-15-42A	Complete 200-TW-2 OU Field Work through Drilling and Sample Collection	10/31/01	09/29/01 (A)	
M-13-26	Submit Plutonium/Organic-Rich (200-PW-1) Work Plan	12/31/01	12/20/01 (F)	
M-13-00L	Submit Three 200 NPL RI/FS (RFC/CMS) Work Plans	12/31/01	12/31/01 (F)*	Yellow
M-16-27B	Complete 100-HR-3 Phase II, ISRM Barrier Emplacement (Planning, Well Installation, and Barrier Emplacement)	12/31/01	12/31/01 (F)	
M-24-51	Install Three Additional Wells at SST WMA B-BX-BY	12/31/01	9/05/01 (A)	
M-24-52	Install Three Additional Wells at SST WMA U	12/31/01	9/29/01 (A)	
M-24-53	Install Two Additional Wells at SST WMA TX-TY	12/31/01	11/13/01 (F)	Green
M-24-54	Install One Additional Well at SST WMA T	12/31/01	10/19/01 (A)	
M-24-55	Install Two Additional Wells at SST WMA S-SX	12/31/01	11/08/01 (F)	
M-24-00M	Install RCRA Groundwater Monitoring Wells at Rate of up to 50 in Calendar Year 2001 if Required	12/31/01	11/13/01 (F)	

*Currently, two additional work plans are being developed per RL direction received on October 2, 2001. It is anticipated that discussions will be initiated with RL, EPA, and Ecology in late October to address negotiation process for *Tri-Party Agreement* Milestones M-13, M-15, M-16, and M-20 for the 200 Area.

- **DNFSB Commitment:**

None identified at this time.

PERFORMANCE OBJECTIVES: GW/VZ

PI	Task	Status
GW – ISRM Barrier	• Drill 24 wells and inject sodium dithionite by 9/30/01 CV <5.0%; SV <7.5% for BHI portion of ER-08	Notice of Completion submitted on 10/17/01.
GW – 618-11 Tritium Plume	• Drill wells to establish 20,000 pCi/L contour, collect Groundwater samples by 9/30/01 **(Stretch)** CV <5.0%; SV <7.5% for BHI portion of ER-08	Notice of Completion submitted on 10/17/01.

Green

PERFORMANCE MEASURES/METRICS: GW/VZ

None identified at this time.

STRETCH AND SUPERSTRETCH GOALS: GW/VZ

FY01 GW/VZ "Stretch" Goals	Approved BCPs (K)
Tritium Plume at 618-11 Burial Ground – Collect GW Samples by 9/30/01 (BCP 21090 approved 1/01)	$595.4K
S/Total GW – Vadose Zone Stretch Goals:	**$595.4K**

Green

*Notice of Completion submitted on 10/7/01.

FY01 GW/VZ "Superstretch" Goals	Approved BCPs (K)
***Complete Remediation of 60 Square Miles of Hanford Site: (1) River Corridor Well Decommissioning (90 wells)**	$1581.3K
S/Total GW – Vadose Zone Superstretch Goals:	**$1581.3K**

Green

*Carried over from FY00. Work complete; Notice of Completion submitted on 9/4/01 (CCN# 092134).

PROJECT STATUS (COST/SCHEDULE): GW/VZ

- **Schedule:**

GW/VZ Integration Project	BCWS	BCWP	Variance
	$K	$K	$K
ER02 200 Area Remedial Actions	3,951	3,787	(164)
ER08 Groundwater Management	31,184	29,141	(2,043)
VZ01 Groundwater/Vadose Zone	10,986	10,465	(521)
TOTAL Groundwater	**46,121**	**43,393**	**(2,728)**
Planned schedule variance/carryover			
Adjustment for Grand Junction Borehole Logging			284
Effective schedule variance after adjustments			**(2,444)**

Green

PBS-ER02 – 200 Area Remedial Action (Assessment)
Schedule Variance = **($164K); (4.2%)** [Last Month: ($367K); (9.6%)]

Cause: Geophysical logging equipment broke down causing a delay in TW-2 extract borehole casing.

Resolution: Completion of borehole and demobilization activities are identified as FY02 carryover.

PBS-ER08 – Groundwater Management
Schedule Variance = **($2043K); (6.6%)** [Last Month: ($2409K); (8.6%)]
Effective Schedule Variance = **($1759K); (5.6%)**

Cause: RCRA well drilling delayed due to relocation of three wells. An additional drill rig has been added to expedite work.

Resolution: Project completion, including waste disposal, will carry over to FY02.

Cause: 200-ZP-1 PFP drilling activities are behind schedule due to 618-11 Burial Ground drilling taking priority over limited resources; Granular Activated Carbon (GAC) regeneration shipment delayed due to increased analysis and designation priorities.

Resolution: PFP well drilling activities and GAC shipment have been identified for carryover.

Cause: Groundwater Monitoring Network Design awaiting regulator decision on Low Level Burial Grounds (LLBG) and RCRA boundary; hydrologic testing was delayed pending regulator approval of the test plan.

Resolution: Agreement was reached by RL and FH on the WMA boundaries for the LLBG; Ecology resolution is ongoing; scope will be carried over to FY02; hydrologic testing fieldwork continues and schedule is being recovered, but completion of the final report will carryover to FY02.

PROJECT STATUS (COST/SCHEDULE) continued: GW/VZ

PBS-VZ01 – Groundwater/Vadose Zone
Schedule Variance = **($521K); (4.7%)** [Last Month: ($1105K); (10.7%)]

Cause: The Soil Inventory S&T Task study did not start as scheduled due to key Los Alamos National Laboratory (LANL) staff on medical leave.

Resolution: Carryover has been identified.

Cause: S&T experimental work on B-BX-BY tank farm samples delayed due to unanticipated low uranium concentrations and Office of River Protection (ORP) stand down.

Resolution: Carryover has been identified.

PROJECT STATUS (COST/SCHEDULE) continued: GW/VZ

- **Cost:**

GW/VZ Integration Project	FY01 EAC	BCWP	ACWP	Variance
		$K	$K	$K
ER02 200 Area Remedial Actions	3,486	3,787	3,317	470
ER08 Groundwater Management	29,998	29,141	27,915	1,226
VZ01 Groundwater/Vadose Zone	10,636	10,465	10,117	348
TOTAL Groundwater	**44,120**	**43,393**	**41,349**	**2,044**

Green

PBS-ER02 – 200 Area Remedial Action(Assessment)
Cost Variance = **$470K; 12.4%** [Last Month: $743K; 21.4%]

Cause: The 200-TW-2 lab sample analysis costs were less than planned; less effort was required for the drive casings at the B-38 trench.

Resolution: Underrun has been reflected in the EAC.

PBS-ER08 – Groundwater Management
Cost Variance = **$1226K; 4.2%** [Last Month: $1233K; 4.8%]

Cause: Sample analysis underruns due to efficiencies in planning well trips and analyses; savings in well decommissioning subcontract costs; and other Hanford contractors' costs being less than planned.

Resolution: Underrun has been trended and reflected in the EAC.

Cause: IRSM well installation and barrier emplacement costs have been less than planned due to efficiencies in well drilling subcontract costs and chemical purchases.

Resolution: Underrun has been trended and reflected in the EAC.

PROJECT STATUS (COST/SCHEDULE) continued: GW/VZ

PBS-VZ01 – Groundwater/Vadose Zone
Cost Variance = **$348K; 4.7%** [Last Month: $573K; 6.2%]

Cause: Characterization of Systems (COS) Phase I Features, Events, and Processes (FEP) review required fewer resources than planned; offsetting overrun in System Assessment Capability (SAC) historical matching from system enhancements.

Resolution: Underrun has been trended and reflected in the EAC. Work on individual technical element history matching is complete and no additional variances are anticipated. Runtime reductions have been implemented and the project continues to seek ways to streamline the overall history matching and initial assessment runs.

REGULATORY ISSUES: GW/VZ

***Tri-Party Agreement* M-13-00x and M-20-xx Milestones:** *Tri-Party Agreement* Milestone M-13-00L requires the submittal of three 200 National Priorities List (NPL) Remedial Investigation/Feasibility Study (RI/FS) work plans by December 31, 2001. One work plan is in process (200-PW-1). *Tri-Party Agreement* Milestones M-13-00X require submittal of 3-4 work plans per year, such that the RI/FS's for the past practices waste sites will be completed by December 31, 2005. *Tri-Party Agreement* Milestones M-20-XX require the completion of RCRA closure plans by February 28, 2004.

Yellow

Status: Currently, two additional work plans are being developed per RL direction received on October 2. It is anticipated that discussions will be initiated with RL, EPA, and Ecology in late October to address negotiation process for *Tri-Party Agreement* Milestones M-13, M-15, M-16, and M-20 for the 200 Area.

EXTERNAL ISSUES (i.e. HAB, Congress, etc.): GW/VZ

None identified at this time.

DOE-RL & HQ ISSUES/REQUESTS (not covered elsewhere): GW/VZ

None identified at this time.

INTEGRATION ACTIVITIES: GW/VZ

ERC continues to work closely with the River Protection Project (RPP) and Pacific Northwest National Laboratory (PNNL) on vadose zone project plans and issues. RPP and PNNL project managers present related GW/VZ status to ERC management at monthly ERC project reviews.

Green

On July 11, drilling was initiated for the calendar year 2001 (CY01) RCRA well installations. Eleven wells are planned for installation by December 31, 2001. The first six wells were installed by September in support of ORP.

Surveillance / Maintenance and Transition Projects (SM&T)

SECTION C – TRANSITIONING THE CENTRAL PLATEAU

**Data as of month-end September (unless otherwise noted).
Key data as of October 25, 2001.**

Surveillance/Maintenance & Transition Projects (SM&T):

ACCOMPLISHMENTS: SM&T

There was a number of significant Surveillance/Maintenance and Transition (SM&T) Project accomplishments that were achieved during FY01. These accomplishments are summarized below.

Surveillance and Maintenance:

In-tank characterization, sampling and analysis, and visual examination were completed for the two hexone tanks in the 200 Area. In-tank sampling was captured on videotape. An evaluation of alternatives for interim stabilization of the hexone tanks was submitted to RL in July. Approximately 5,000 manhours were expended on the hexone tank task in an adverse environment without encountering any contamination exposures, lost work days, or recordable events.

Public comment/review period was completed in July for the B Reactor Engineering Evaluation/Cost Analysis (EE/CA). The EE/CA was submitted to the regulators for review and approval in September.

Structural inspection of the Plutonium-Uranium Extraction (PUREX) Facility canyon roof was completed, and a final report was issued to RL in April. Observations indicate that water infiltration is continuing from the deteriorated roof cover.

An 18-meter (60-foot) sample line was removed from the PUREX stack during November. Sample line shutdown will result in lower PUREX maintenance costs. In December, contaminated scaffolding was successfully transferred from PUREX to FH for decontamination and redeployment to other Hanford Site projects.

24 large aluminum filter frames were shipped offsite for recycling in January. The filter frames were fabricated in support of N Reactor operations, and equate to approximately 11 metric tons (25,000 pounds) that will not require disposal in the Hanford Site landfill.

All FY01 planned activities were completed for roof repairs/maintenance (for five facilities), 100 and 200 Area asbestos abatement, and passive vent closures. Major asbestos abatement/removal was accomplished at the 181-N Pump House and the 224-U building. Over 712 cubic feet of non radioactive, friable asbestos was safely removed from the 181-N pumps, piping and river screen wash systems. And another ~1,800 linear feet of asbestos containing materials (ACM) was successfully removed from exposed process piping systems located outside the 224-U building.

Interim stabilization of four waste sites was completed.

All planned herbicide applications were completed.

The FY00 Radiation Area Remedial Action (RARA) annual report was issued. Since July 1994 (start of the ER contract), the RARA organization has experienced only one lost time incident.

ACCOMPLISHMENTS continued: SM&T

Canyon Disposition Initiative (CDI):

The CDI Feasibility Study Rev. 0 and data summary report were completed in September. This study provides a detailed analysis of several alternatives to be considered for final disposition of the deactivated 221-U (U Plant) chemical processing canyon facility. The study is also expected to influence a final disposition determination for the four other canyon facilities on the Hanford Site (PUREX, B Plant, REDOX, and T Plant).

CDI was initiated in FY97 to assess alternatives for dispositioning the five, very large Hanford canyon facilities. Upgrades to the U Plant crane and cell cleanout were required in the assessment. The study results indicate that the potential exists for significant cost savings and reduced worker exposure in disposing of these facilities through alternative approaches.

SAFETY/ISMS/CONDUCT OF OPERATIONS: SM&T

See Executive Summary.

BREAKTHROUGHS/OPPORTUNITIES FOR IMPROVEMENT: SM&T

None identified at this time.

LONG-TERM (6 MONTHS PLUS) IMPORTANT ITEMS: SM&T

None identified at this time.

MAJOR COMMITMENTS (FISCAL YEAR PLUS 6 MONTHS): SM&T

- **DOE Secretarial:**

None identified at this time.

- **DOE EM Performance Agreement:**

None identified at this time.

- ***Tri-Party Agreement* Milestones:**

None identified at this time.

- **DNFSB Commitment:**

None identified at this time.

PERFORMANCE OBJECTIVES: SM&T

None identified at this time.

PERFORMANCE MEASURES/METRICS: SM&T

None planned in FY01.

STRETCH AND SUPERSTRETCH GOALS: SM&T

None identified at this time.

PROJECT STATUS (COST/SCHEDULE): SM&T

- **Schedule:**

Surveillance/Maintenance & Transition Project	BCWS	BCWP	Variance
	$K	$K	$K
ER05 Surveillance & Maintenance	13,737	13,675	(62)
ER07 Long-Term Surveillance & Maintenance	59	59	(0)
TOTAL SM&T	**13,796**	**13,734**	**(62)**

Green

PBS-ER05 – Surveillance and Maintenance
Schedule Variance = **($62K); (0.5%)** [Last Month: ($173K); (1.4%)]

Cause: N/A

Resolution: N/A

PBS-ER07 – Long-Term Surveillance and Maintenance (BCWS $59K for FY01)
Schedule Variance = N/A

- **Cost:**

Surveillance/Maintenance & Transition Project	FY01 EAC	BCWPS	ACWP	Variance
		$K	$K	$K
ER05 Surveillance & Maintenance	12,652	13,675	12,588	1,087
ER07 Long-Term Surveillance & Maintenance	31	59	31	28
TOTAL SM&T	**12,683**	**13,734**	**12,619**	**1,115**

Green

PBS-ER05 – Surveillance and Maintenance
Cost Variance = **$1087K; 7.9%** [Last Month: $1024K; 8.1%]

Cause: Underruns in 200 Area S&M work on passive vent sealing, waste disposition, roof inspections, and herbicide application subcontract costs; Underruns are offset by hexone tank sampling cost overruns from additional engineering, additional job hazard analysis, and higher mobilization costs.

Resolution: Underrun/overrun have been trended and are reflected in the EAC.

PBS-ER07 – Long-Term Surveillance and Maintenance (BCWS $59K for FY01)
Cost Variance = N/A

REGULATORY ISSUES: SM&T

None identified at this time.

EXTERNAL ISSUES (i.e. HAB, Congress, etc.): SM&T

None identified at this time.

DOE-RL & HQ ISSUES/REQUESTS (not covered elsewhere): SM&T

None identified at this time.

INTEGRATION ACTIVITIES: SM&T

Contaminated scaffolding was successfully transferred from the Plutonium Uranium Reduction Extraction (PUREX) facility to FH for decontamination and redeployment to other Hanford projects.

Green

S&M assisted CHG in obtaining additional land for parking facilities adjacent to the PUREX facility to support construction activities. Support was also provided to FH in obtaining crane parts required for Spent Nuclear Fuel Project operations, and in obtaining tools from U Plant for use at T Plant.